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'OUT OF UTOPIA'

THE (RE)PRODUCTION OF PRIMARY CARE RESEARCH POLICY

Sara Elizabeth Shaw

University College London

Submitted for PhD Examination

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Abstract

This thesis challenges conventional approaches to policy analysis associated with a rational model of decision-making and shows how a discursive approach can add essential insights to contemporary policy debates. I investigate primary care research policymaking as a socially accepted set of practices, asking: what are the historical, social and ideological origins of primary care research in England? Which discourses have dominated the debate, and why? What are the tensions between discourses relating to primary care research policy and any potential means for coping with these?

I draw on the theoretical and methodological approach of discourse analysis and use Parker's (1992, 2002) framework for distinguishing discourses to inform the selection and analysis of 29 policy documents (from 1971 to 2005) and 16 historical and contemporary policy stakeholders for in-depth interview. Identification of discourses is aided through importing relevant theory; applying focused questions; exploring the use of rhetorical devices; incorporating contextual information to appreciate how and why discourses are shaped; and comparing and contrasting policy language. This is brought together into a descriptive and theoretically situated account through the methodological process of writing.

Findings show how primary care research policies have shaped and been shaped by prevailing discourses. Political emphasis on a primary care-led NHS in the 1990's led to increased political recognition and favourable changes in the research budget. However, the utopian era that followed fell into decline as primary care research no longer aligned with scientific, economic and global discourses emphasising microscopic 'discovery'; exploitation of information; large-scale consumption; and the contribution of highly technological activities to 'UK plc'. Unable to compete on these terms, primary care research has been repositioned as a strategic resource and population laboratory for epidemiological research.

In addition to illuminating the emergent nature of policymaking, this work provides a useful framework for analysis of national policy.

Acknowledgements

I am grateful to my main supervisor, Professor Trish Greenhalgh, for guiding, challenging and encouraging me and for allowing me the freedom to be creative; to Professors Yvonne Carter and Roland Petchey for their early contributions in shaping my research and supporting me on my doctoral project; to my academic colleagues generally for their support and encouragement; and to the Department of Health Research Capacity Development Programme for funding my work.

I would like to thank all those who kindly gave up their time to participate in interviews, without whom this work would simply not have been possible.

Last, but not least, I would like to acknowledge the invaluable and essential support of family, friends and colleagues. In particular I would like to thank my mother and Richard who have untiringly listened, nurtured and challenged.

"*The good life can only be lived in a society in which tidiness is preached and practised, but not too fanatically, and where efficiency is always haloed, as it were, by a tolerated margin of mess.*"

Aldous Huxley

(cited in Pinder et al, 2005)

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SECTION ONE:
OVERVIEW

* 1 *

INTRODUCTION, AIMS AND OVERVIEW

1.1 Introduction

The roots of primary care research are firmly based in the general practice tradition:

> "The generalist clinician stands at one of the most complex intersections in society, as science, represented by psychological, physiological and pharmaceutical interventions, and the humanities, as represented by the social contexts, beliefs, narratives and shared mythologies, intermingle in consultations to formulate, on the one hand, interventions and their resultant outcomes and, on the other, extended stories that serve to embellish lives with hopes and fears." (Carter & Elwyn, 2003)

The above quote illustrates how primary care research has been influenced by the social, psychological and physical complexity of encounters within such settings and suggests a range of professionals and activities being embraced in support of this. However, as a field of research, primary care is still relatively under-explored and regarded as a newcomer by many researchers from other disciplines (Carter & Elwyn 2003), as well as within policy. To explore this further, this chapter begins with a brief introduction to the areas of primary care research and of policy analysis (with a more in-depth overview of primary care research presented in Appendix 2[1]). It then moves on to describe the aims of my research and detail the research questions to be addressed within the study and my reasoning behind this. This leads the reader into an overview of subsequent chapters that aims to provide a general idea of the structure of my thesis as well as an indication of what readers might expect to find as they progress from chapter to chapter.

[1] Appendix 2 introduces the concepts of primary care and of research in more depth, before describing the historical development of the area including key policies, organisational developments and philosophical underpinnings.

1.2 Overview of primary care research and policy

Since the early 1990s, primary care research has come to occupy an important place on the policy agenda in England. It is still a relatively new and ill-defined area of research, facing variable research allocations from the National Health Service (NHS) budgets and competing with the historical stronghold of secondary care and associated research funding streams. However, those within the English policy arena acknowledge the potential contribution to healthcare of a primary care-led NHS (Department of Health 2000c;Secretary of State for Health 1996) and the need for a knowledge base to support this.

However, there is concern over the current and future place of primary care research. Following the *Mant Report* in 1997, this was an area destined to receive increased funding and support (Mant 1997), acknowledging the need for both infrastructure and project funding and feeding into successive governments' strategies for a primary care-led NHS (NHS Executive 1994). This, along with other more recent reports and ensuing debate, have supposedly marked an era of integrative effort and the beginning of a new 'research age' for primary care. However, the increased funding was envisaged for a period of five years and, following this, there has been increasing commentary and debate regarding the long-term benefit of such investment. At the end of this period, NHS research began a period of restructuring leading into the development of the United Kingdom Clinical Research Collaboration (UKCRC) with priority areas, such as cancer and child health, identified and funded as collaborative research networks (Department of Health 2004b). Rather than recognising the long term benefits of investment in primary care research, this restructuring initially omitted primary care entirely, though the UKCRC subsequently acknowledged that primary care has a supporting role underpinning research within each priority area. This led to the establishment of a primary care research network for England (PCRN-E) and eight Local Research Networks (LRNs) focused on primary care, with a revised remit and substantial reduction in funding relative to previous organisational structures.

The analysis of policymaking usually adopts an instrumental approach, whereby the goal of improving the quality of the *policy output* guides the analytic effort. A conventional analysis might focus on the implementation of existing policy, or on

explaining the political and professional interests that stand in the way of a substantial 'research turn' in primary care. I aim to enhance insight by raising a different sort of question and argue that policymaking deserves attention as a social phenomenon. I adopt a similar approach to that of writers such as Hajer (1995) and Fischer (2003) who view policymaking, not just as a means for finding acceptable solutions for preconceived problems, but as the dominant way in which social conflicts are regulated. From this perspective policymaking involves much more than thinking of new solutions to existing problems: it also comprises the redefinition of given social phenomena in such a way that it is possible to find solutions for them. For instance, environmental issues have been reframed in terms of global, population survival and away from ecological minority interests, thereby allowing for acceptable solutions to be devised (Hajer 1995).

From this standpoint, if examined closely, the discourse of primary care research has often been fragmented and contradictory. Rather than offering a coherent picture, primary care research discourse, as set out in policy documents and by policy stakeholders, represents a surprising collection of claims and concerns brought together by a wide variety of actors with differing, often conflicting, agendas. Yet somehow, those seeking to implement policy relating to primary care research often tacitly assume that this mix of claims and concerns relates to a coherent set of problems and, following on from this, then seek to distil seemingly coherent problems and solutions out of this.

Rather than attempting to present a rational and coherent approach to policy, I argue for appreciation of this complexity and the tensions within the policy process. This raises all sorts of questions around the process by which such a complex set of claims and concerns becomes seemingly rational and coherent. How does this work? How do problems become defined and accepted on the policy agenda? How do others get lost? How does this change over time? Experts of all sorts are called upon to define the problem and its parameters - but who decides what constitutes 'expert knowledge'? How are 'experts' identified and selected? Which institutions and categories of person gain and lose from addressing a particular set of problems? What is the process of justification for dominant groups to be able to tell their story in support of the present, preventing others from making their own history? And what is the impact on future research in primary care?

1.3 Research aims

Given the above discussion relating to the varied history of primary care research and the tensions inherent within policymaking, it is important to explore primary care research policymaking as a socially accepted set of practices. This research therefore seeks to show how a social constructivist approach to policymaking can add essential insights to current policy debates and to the analysis of the contemporary politics of primary care research. My research therefore has the following three aims:

a) To frame 'primary care research' in the wider context of NHS policy in England;
b) To illuminate and explore the social construction of national policy relating to primary care research, expose possible tensions and their implications;
c) To draw attention to the complex nature of research and policy and the tensions and contradictions within this; and
d) To inform future decision making relating to primary care research and policy.

1.4 Research questions

These aims lead into a series of focused research questions, as follows:

- What are the historical, social and ideological origins of research in primary care in England?
- Which discourses have dominated the debate about primary care research policy and which have been subjugated or excluded, and why?
- How have different constructions of primary care research informed different realities and subsequent actions?
- What are the tensions between discourses relating to primary care research policy and what, if any, are the means for coping within these?

1.5 Research outputs

Throughout my research, I have been aware of the potential to contribute to the development of primary care research and wider policy debates. A traditional format of 'conclusions and recommendations' does not flow neatly from one of the central arguments of my thesis: that there are no simple answers. Indeed, recommendations are highly contextual and contingent. I have therefore sought to:

a) Produce a conceptual framework with which to understand the construction of national policy on primary care research;
b) Illuminate the nature of policymaking so that those directly and indirectly involved might come to appreciate its emergent and contingent nature; and
c) Reflect on the use of discourse analysis as a method to facilitate analysis of national policy and consider how others might use the outputs of my research in different contexts and settings.

1.6 Thesis structure and chapter overview

Discourse analysis takes as its starting point the general idea that language is structured according to different patterns that people use and follow when they take part in different domains of social life (Phillips & Jorgensen 2002) (for example, discourses associated with the family or with gender). This raises interesting tensions in the use of discourse analysis and the presentation of research within the confines of a doctoral thesis, which has its own set of 'rational' rules and conventions. Academic convention does not generally permit the use of innovative means for presenting work of this nature. Hence, although I adopt a theoretical perspective for identifying taken for granted constructs relating to the world of primary care research, I am then confined by conventions for presenting this work that are grounded in an epistemological view of research that is largely taken for granted within academe. Although I have made every effort to avoid imposing this type of structure onto the research process and the data, my thesis makes use of the standard rules and terminology typically associated with doctoral research and academic texts; and uses terms such as 'findings' and 'methods' to guide the reader throughout.

Section Two focuses on theoretical and methodological considerations in the study of primary care research policy. Chapters 2 and 3 explore the area of policy analysis, drawing on social policy and administration, policy analysis, and political and social philosophy to provide a cross-disciplinary discussion of policy including the question, 'what is policy?' and exploring the different approaches to the analysis of policy, contrasting rationalistic and constructivist perspectives. Appendix 2 provides an overview of the historical roots of policy analysis. It describes the characteristics of a traditional policy approach and the development of the recent evidence-based policy

movement, before considering the limits that such a rational approach may entail. This critique is taken further in Chapter 3, which focuses on the social construction of policy and associated influences including poststructuralism and discourse theory. This chapter explores how the meaning of a policy becomes determined through its relationships to different situations and actors and through the social system and ideological framework of which it is a part. I introduce a number of key writers, such as Fischer, Parker and Foucault, in considering a discursive perspective of policy that acknowledges the role of language and discourse (and access to it) as key to the development of primary care research policy.

In light of these considerations Chapter 4 describes the methodological challenges to the study of policy as socially constructed. It acknowledges language and discourse as having an underlying role in structuring social action and considers different approaches to the study of discourse. The chapter describes three main reference points relating to the discourse analysis literature – conversation analysis, linguistic analysis and poststructuralism – to provide an overview of the theoretical and methodological approaches. For completeness, the less socially grounded approach of content analysis is also included. In light of the nature of primary care research policy and the role of social, structural and institutional forms in its development, I argue for a socio-cultural approach to policy analysis that is relevant to the aims of this thesis.

Section Three then provides an in-depth description of the method adopted. In Chapter 5 I describe how the research was undertaken and justify 'sense-making' as an analytic process that does not realistically separate data collection and analysis, although for the purposes of the thesis, to follow academic convention and to provide clarity to readers, I discuss data collection (including sampling documents and selecting and interviewing policy stakeholders), and data analysis separately. I describe a framework for distinguishing discourses that draws on the work of Ian Parker (Parker 1992; 2002). I then describe the process of initial data exploration, approaches to reading documents and the use of theoretical concepts to further illuminate the analytic process; mapping of policy actors and uncovering inter-relationships between documents, actors and policy initiatives; drawing attention to the different stages of the framework used in order to ensure an in-depth description of the analytic process. I consider the process of writing-

up and the means by which a rich picture can be painted and thereby offer a meaningful presentation of data.

Chapter 6 extends my methods section further. Given the socially constructed nature of action, I reflect on my own ability to interpret meanings and to take account of theoretical debate in this area, as well as the means by which judgements made throughout analysis might be made clear to readers.

Section Four is dedicated to my findings. Whether or not the problems associated with primary care research appear incompatible with existing institutional arrangements depends on the way in which problems are framed and defined. Emerging and changing conceptualisations of primary care research are therefore an important topic of analysis. I therefore begin Chapter 7 by presenting the historical emergence of primary care research as a defined area of policy; how primary care research has been principally conceptualised and how it has been defined, investigated and refined over time. This raises a number of compelling questions such as: What is primary care research? What are the social and ideological roots of primary care research policy? How has this changed over time? In what sense do conceptualisations of primary care research open up entrenched relations of power? To begin to answer some of these, the chapter also explores the emergence of science policy as an area of government. Chapter 8 then expands on this to present and describe discourses of science, economy and globalisation in particular. It predominantly considers changes over the last thirty years and presents analyses relating to how such discourses have shaped and influenced policy relating to primary care research.

Having shown how the language of science and economy is prevalent throughout the majority of policy documents studied, Chapter 9 then focuses on the less dominant discourses associated with social benefits of health-related research, taking into account if, how and why they are drawn upon and how this positions the public in particular. Following this, Chapter 10 explores government control of health-related research via the policy process and the means by which knowledge production becomes focused on certain areas and not others. It considers the influence of 'scientific management' on research policy and the tools and practices that have developed subsequently to govern research in the context of primary care.

The final chapter in the findings section, Chapter 11, reflects on the means by which policy proceeds in order to more fully elucidate the means by which discourses are constructed, employed and sustained. In light of the interpretive approach adopted, it explores the tension between the rationally perceived approach to policy that is often presented in documents and the more emergent process described by many interviewees. In addition it explores the means by which policy related problems and solutions are constructed, as well as the involvement and input of particular stakeholders within this process.

Section Five is the final discussion section. Chapter 12 reflects on the aims of the thesis and critically discusses what has been discovered within the study. The chapter includes discussion of the contribution of interpretive analysis of contemporary policymaking; the theoretical and operational limitations of discourse analysis; and the development of any framework for evaluation of national policy. My thesis does not attempt resolution of tensions in existing policy, but is concerned primarily with identifying such tensions and any means of coping with these. Hence, rather than making recommendations – as per a conventional, rationalist approach – this final chapter summarises the hidden meanings behind primary care research policy that have been uncovered as a result of this study. In doing this, it describes the potential benefits of enhanced capacity to cope with multiple and sometimes contradictory policy perspectives that are characteristic of contemporary primary care research policy.

1.7 Summary

This chapter has provided readers with a preface to the areas of primary care research and policy. Having provided readers with the broad context of my research, I have then detailed the research aims and questions before describing the varied outputs from my research. In order to guide readers throughout the remainder of my thesis, I have then provided a brief overview of subsequent chapters.

SECTION TWO:
METHODOLOGICAL AND THEORETICAL CONSIDERATIONS

* 2 *

CONSIDERING 'POLICY'

2.1 Introduction

The origin of a specific focus on policy as an area of inquiry is largely associated with Harold Lasswell who envisioned a multi-disciplinary enterprise capable of guiding the political decision making processes of post-Second World War industrial societies. Since this time, there has been a rapid expansion of policy studies, crossing disciplinary boundaries. However, defining 'policy' is not a straightforward process. A range of definitions has arisen in these years and, although 'policy science' has been recognised as an area for study and review, it is not until relatively recently that this has really begun to take shape.

This chapter provides an overview of approaches to public policy. It is not meant as a systematic review but as a 'territory map' of the literature. I describe the origins of a more rational approach to policy[2] and the recent development of evidence-based practice as an example of rationally conceived policy, before exploring alternative means of thinking about policy and introducing constructivist approaches to policy inquiry[3].

---

[2] Where deductive reasoning and the rational content of theories is seen as the basis for valid knowledge and any ensuing action/s. The rational model of decision making that flows from this is seen to follow steps closely related to the methods of scientific research and encourage the construction and testing of general laws or theories. In relation to public policy this might involve empirical identification of problems, formulation of goals and objectives leading to an optimal solution.

[3] Constructivism is a term originating from sociology ('social construction' being associated with Berger and Luckman's 1966 publication, '*The Social Construction of Reality*') and referring to the way in which knowledge is socially constructed (i.e. contingent on perception, convention and social experience). It invites us to be critical of the view that conventional knowledge is somehow based on objective and unbiased observations of the world around us (Burr 2003). Constructivism and constructionism are often used interchangeably. Following Hacking (2000), to avoid any implied association with the original mathematical root of the term 'constructionism' I use the term 'constructivism' throughout.

2.2 What is policy?

The Oxford English Dictionary provides a simple definition of policy as: "an organized and established system or form of government or administration (of a state or city); a constitution, polity" (1989). Building on this, some writers emphasise policy as an intended course of action:

> "...whatever governments choose to do or not to do" (Dye 1984:1 cited in Fischer 2003)

More complex definitions have also developed, including the actual behaviour of implementing that action:

> "...an officially expressed intention backed by a sanction, which can be a reward or a punishment." (Lowri and Ginsburg, 1996: 607).

Others point to something bigger than particular decisions, with a sense of purposiveness or a set of 'values' that aim to define what an organisation or system is there for. If we take the notion of policy as involving purposiveness of some kind, then it is not sufficient merely to think of an intended course of action. Instead, the term policy needs to be able to embrace both what is intended and what occurs as a result of that intention. The focus is therefore not just on the words people use but also on the doing. This might be regarded as purpose in terms of what is intended as well as what happens. Heclo therefore argues that the use of the term policy in the sense of intellectual resolve is insufficient (Heclo 1972):

> "...for serious political study, it seems useful to recognise that, while policy is purposive, a statement of purpose does not itself constitute the sum of a policy. The alternative is to tie policy studies to the view that an intention produces a policy regardless of whatever actually occurs." (1972: 85)

These ideas are largely reflected in recent moves to modernise government. Following election in 1997, the Labour government envisioned policymaking as:

> "...the process by which governments translate their political vision into programmes and actions to deliver 'outcomes': desired changes in the real world." (Cabinet Office 1999a: 2.1)

Although this reflects notions of purposiveness and outcomes, it falls short of including resultant action, the focus remaining on desired rather than actual change. The emphasis

is largely on formulation of policy, whilst recognising that this cannot be disentangled from implementation.

Following a similar line of reasoning, it can also be argued that policy be considered as something broader than the tangible pieces of legislation and regulations which are administered by government departments. A policy can also consist of less tangible elements including what is *not* being done. Policy can therefore include both action and inaction. Subsequent sections draw on a more constructivist stance to policy, captured by Murray Edelman, who describes policy as

> "...a set of shifting, diverse, and contradictory responses to a spectrum of political interests." (1988: 16).

Before exploring this approach in more depth, I examine the initial development of the study of policy.

2.3 Developing a Policy Approach

Weber demonstrated that the growth of industrial civilisation brought about a search for more rational forms of organisation (Giddens 1971; Weber 1991). Out of this emerged a conceptual separation of policymaking as a *political* function from administration as a *bureaucratic* function. This rationalistic view of public administration and the political world continued throughout the first half of the twentieth century with policy related inquiry beginning to develop across disciplines, though lacking a common approach. The methods associated with the natural sciences provided the framework for this initial focus, facilitating the search for rational and knowledgeable governance. From this perspective, it was considered possible to obtain facts about potential problems in public life, which could then inform policy solutions (Parsons 1995).

A co-ordinated approach to policy science began to be formulated in the US via the work of Harold Lasswell. *The Policy Orientation*, published in 1951, laid the groundwork for a grand vision of policy studies, or the study of the role of knowledge *in* and *of* the policy process. He called for an overarching social science discipline, which was geared to the task of adjusting modern democratic practices to the realities of industrial society. To deal with the complexities of modern government and corporatism, Lasswell sought to lay out a framework for the development of policy

science and the training of 'policy experts' capable of bringing the necessary knowledge to the decision making process. His approach was defined by three characteristics, summarised in Box 1.

Box 1: Characteristics of Lasswellian Policy Sciences

1) *An interdisciplinary approach*, cutting across existing specialisations, drawing in varying degrees and circumstances on contributions from political science, sociology, anthropology, psychology, statistics and mathematics, as well as physical and natural sciences.
2) *A problem-oriented approach*, acting as a mediator between government decision-makers, academics and the public and providing objective solutions to problems that would minimise the need for unproductive political debate.
3) *An explicitly normative orientation*, recognising the need for 'policy sciences' to be grounded in human values and to support the development of democracy and human dignity.

The contribution of Lasswell continues to be widely recognised, as is that of other authors from the same era including Herbert Simon whose concern with human decision making centred on the idea of rationality as 'bounded but capable of improvement' (Simon 1945). Simon's idea of examining decision making in terms of a sequence of rational stages - intelligence, design and choice - has formed a central element of policy analysis often referred to as incrementalism (Parsons 1995)[4]. Charles Lindblom provided a critique of this model of rational or stagist decision making and the notion of the policy cycle. In criticising previous writers like Simon and Lasswell, he rejected the idea that thinking in terms of stages was of any real value to the study of policy, viewing it as an artificial means of looking at policy. Rather, he proposed a 'science of muddling through', which took more account of power and brought attention to policy as a complex, interactive process (Lindblom 1959)[5]. Aaron Wildavsky also challenged

[4] Simon's main concern centred on decision making in organisations. Although his work falls short of rationality in the economic sense of the term and acknowledges that context and instinct might sway decision making; he remained convinced that human behaviour is rational in terms of carrying intentionality. His term 'bounded rationality' emerged from his analysis of administrative behaviour to capture the notion that rationality is limited (but not irrational), for instance, in relation to the limitation of human attention span or habit and routine (Parsons, 1995).

[5] Lindblom embraced the complexity of the policy process through consideration of different inter-relationships between, for instance, politicians and interest groups, as well as the study of 'deeper forces', such as industry, that might influence the policy process (Parsons, 1995).

the notion of rational stages and considered the benefits of 'speaking truth to power' (Wildavsky 1979)[6].

The life-cycle approach to policy science was received with some enthusiasm as it sought to improve policy decision making by providing a rational structure through which the complex nature of reality might be better considered (Parsons 1995). Indeed it is this approach which, to borrow a concept from Thomas Kuhn, has become the 'normal science' of policy analysis (Kuhn 1962). This is despite the fact that, although Lasswell advocated a somewhat rational approach to policy science, his vision was also one of an interdisciplinary and mixed method approach.

Authors such as Hogwood and Gunn (1984) have attempted to specify uses of the term 'policy', and look to guide what they see as a modern, rational process. Their work has produced a list of ten key components of policy[7] that is arguably the archetype of the rationally conceived policy handbook. From this perspective policy provides the vehicle for politicians and civil servants to express political, rational thought. To have a policy or policies is to have rational reasoning, reflecting an understanding of, and a solution to, any given problem. In this context, policy and politics are quite separate entities. They are distinct terms; with policy indicating the rational, administrative and bureaucratic process or route to political success, and politics indicating the means by which government and social life is organised (Cohen 2001). In this light, policy is the essential currency of modern democratic exchange with the language and rhetoric of policy being the main instrument of political rationality (Lasswell 1951; Parsons 1995).

a) Evidence-based policy and practice

This rational approach to policy resonates with recent efforts to try and build a culture of evidence-based policy and practice, whereby research is presented as a logical and linear process that can bring order to chaos. Indeed the introduction of a coherent NHS

[6] Wildavsky recognised that as different groups struggle to interpret policy in relation to their own set of interests so policy gets reinterpreted and reshaped through discussion and negotiation. This means that the policy process is constantly evolving over time and this raises the question of who's interests to serve, or who's interpretation to elicit and pursue. This is reflected in the term 'speaking truth to power': his book of the same name identified a need for policy analysis to better appreciate and address wider political and social relations, and emerged out of a concern with the increasing polarisation of political elites in the US.

[7] Described as follows: as a label for a field of activity; an expression of general purpose or desired state of affairs; specific proposals; decisions of government; formal authorisation; a programme; output; outcome; a theory or model; and a process

R&D strategy (Department of Health 1991) promoted systematic attempts to evaluate clinical and/or organisational practice (Klein 1996) and, in doing so, adopted a problem-solving model that implicitly supported this supposition (Harries, Elliot, & Higgins 1999). Policymakers have sought evidence for some time however, as Klein (1996) points out, the extent to which this evidence has been used effectively in making informed policy decisions, as opposed to simply justifying existing decisions, is unclear.

The recent emphasis on evidence-based policy comes hard on the heels of evidence-based medicine, described by its proponents as:

> "...the use of mathematical estimates of the risk of benefit and harm, derived from high-quality research on population samples, to inform clinical decision-making in the diagnosis, investigation or management of individual patients." (Greenhalgh, 2006a)

In this model, all areas of the health service are encouraged to develop a culture based on enquiry and the use of research evidence to inform practice (Carter, Shaw, & Macfarlane 2002) where evidence-based medicine is seen as a means of enabling the diagnosis, treatment and management of patients to be based on the best evidence available. In practice, this means integrating individual clinical expertise with the best available external clinical evidence from systematic research. Although this model is hotly contested (Cummins & Macintyre 2002; Gabbay et al. 2003; Greenhalgh, Kostopoulou, & Harries 2004; Mykhalovskiy & Weir 2004; Traynor 2000), the assumed logic of this system has led to consideration of its conceptual and practical application in other areas. Hence, if medicine can be based on evidence, why not policy?

Just as the principles behind the evidence-based medicine movement have informed the development of the NHS from the early 1990's, as a response to the growth in professional power and clinical judgement (Pope 2003) and with a new emphasis on using scientific knowledge to inform clinical practice, so there has been a drive to apply the same principles to policymaking (Klein 1990). Labour governments' pronouncements on reform of the civil service have become increasingly concerned with a need to strengthen its strategic policymaking ability that has arguably had the effect of making policy more pragmatic than ideological (Williams 2002) and led to a greater separation of policy and politics. However, the move towards evidence-based

policy has not been without its critics. Indeed, the rise of evidence-based policy has been analysed as a renewed optimism about the role of scientific inquiry that encompasses a new alliance between scientific-rationality and new managerialism (Sanderson 2002):

> "[Evidence-based medicine] is distinguished by the fact that it privileges particular kinds of evidence – 'scientific' evidence, with a strong emphasis on randomized controlled trials and systematic reviews. It is not at all self-evident that this model is appropriate for, or indeed relevant to, the making of policy. In the case of policy, evidence tends to be something of a Delphi oracle – difficult to decipher and apt to be misinterpreted." (Klein, 2003: 429)

In relation to policy, there is little dispute that decisions should be informed by evidence: what is contested is that policy should be based on scientific evidence in the same way as evidence-based medicine (Harries, Elliot, & Higgins 1999; Klein 2003; Macintyre et al. 2001; Majone 1989; Sanderson 2002; Sweeney 1996). This has not deterred those in the world of policy. The Labour government's initial plans for modernising government referred to the need for a better use of evidence and research in policymaking (Cabinet Office 1999a); to a greater emphasis on 'what works'; and on data rather than dogma (Shaxson 2005).

b) Government approaches to shaping public policy

There have since been a number of government responses that reinforce this message. Pawson refers to as a *mushrooming* of national and international consortia for evidence-based policy that represents:

> "...the biggest single change on the applied research horizon for many a year." (2002: 212)

Examples of such developments include the Cabinet Office report on *Professional Policy Making for the Twenty First Century* (Cabinet Office 1999a), which describes the core policy process as involving a linear process of understanding of the problem, developing solutions, putting solutions into effect and then testing success and making it stick. The Centre for Management and Policy Studies has also been created within the Cabinet Office to disseminate good practice in policymaking (Bullock, Mountford, & Stanley 2001); and a National Resource Centre for Evidence Based Policy has also developed to provide a pathway into developing policy databases. These initiatives

indicate a vision of future policymaking as based on setting up the main arguments and establishing broad principles and political boundaries, followed by an examination of what evidence currently exists, the gaps and the primary research that might be commissioned (Williams 2002). It is a model embodied in the Cochrane Collaboration, which undertakes systematic reviews on the effects of health care intervention; and its sibling, the Campbell Collaboration, which focuses on social and educational interventions (Oakley 2000).

This model of policy is based on problem recognition and outcomes or outputs and involves problem identification, collection of data on alternative solutions and selection of the alternative that best resolves the problem (Hannay et al. 2003). According to Bonner (2003), this model of evidence-based policy and practice is remarkably close to the notion of 'experimenting society' advocated in the 1960's. In this vision, robust experimental designs were considered the best way to determine the effectiveness of social programmes in order to provide the evidence that policymakers needed. This rests on a rationalistic approach to social enquiry within which:

> "...the experimental model is framed [and] assumes a realist ontology, that is, there is one external reality that can be known through the adoption, and rigorous application of, natural science methods for the study of social phenomena." (Bonner, 2003: 80)

The assumed logic of this approach is that it is based on observable and successive events, where evidence gathering is a process of gradual accumulation. One of the key assumptions that follows is that the collection of more evidence will take policy actors closer to better, more rational policy decisions (Tenbensel 2004). The application of this approach to the field of policy is not only contested, it is also widely recognised that randomised controlled trials – the so-called gold standard of research and evidence-based medicine (Black 1996; Sackett, Rosenberg, Gray, & et al 1996) – and economic evaluations, such as cost-effectiveness analysis, are often not feasible, practical or relevant to strategic policy and decision making. Despite such criticism and on-going debates about the limitations of experimental design and its application to social problems, it has remained dominant and has influenced the production of 'robust evidence' as a sound basis for policy decisions.

Ultimately, the renaissance of evidence-based policy indicates a renewed confidence in the potential for achieving social progress through the application of reason (Sanderson 2002) where decision making is regarded as a science that aims to:

> "...formalize the elements of complex decision problems so that a set of logical axioms can be used to analyse and compare alternatives, one of which will, it is presumed, emerge as an "obvious" choice. (Miller1990: 164)

Those adopting a critical stance towards the concept of evidence-based policy therefore argue that increasing the role of evidence in policymaking depends upon finding better ways of integrating it into policy judgements and draw our attention to the value of research-informed policymaking (Bonner 2003; Hanney et al. 2003; Pawson 2002; Sanderson 2002; Williams 2002).

2.4 The Limits of a Rational Approach to Policy Science

So far, I have described the theoretical underpinnings of policy science, focused largely on rationalistic and empiricist approaches and influenced by scientific method. This has placed importance on positivistic enquiry[8]. As summarised by Fischer, this approach rests on the notion that policy can be rationally planned:

> "Policy analysis, in this model, strives to translate political and social issues into technically defined ends to be pursued through administrative means." (2003:4)

In this context, as I have begun to show through the example of evidence-based policy, politics does not fit into the methodological approach, and is thereby regarded as problematic. Indeed, rather than developing new approaches to policy analysis that recognise the inherently socially constructed nature of politics and policymaking, there have been some who have advocated a change to the political system to make policy analysis practicable (Heineman et al, cited in Fischer 2003). Such an approach draws attention to the on-going problem that, even if empirical policy analysis no longer has an epistemological monopoly:

[8] That is on the objective separation of facts and values and the search for generalisable findings devoid of the social context from which they had been drawn.

> "...the research procedures and protocols that have grown out of this approach remain firmly institutionalised in administrative and legislative requirements and in the policy process itself." (Jennings, 1987: 7).

Policy analysts have continued to draw attention to the constraints on rational policymaking, particularly in terms of the political and organisational concerns of the various policy actors (Harper 2004; Wildavsky 1979). Indeed, policymaking is far more grounded in values and politics than is clinical decision making (Lohr, Eleanzer, & Mauskopf 1988) and must therefore take account of the social and political environment in which it will be implemented (Williams 2002).

a) Policy and values

A number of writers have looked critically at the development of policy science, particularly in the United States (for instance; Fay 1975; Fischer 2003; Roe 1994; Yanow 2000). They criticise the overly technical view of politics that envisages the creation of a policy science, that is:

> "...a set of scientific laws and axiomatic decision rules which a politician can use to determine objectively the best course of action to take" (Fay, 1975: 49).

The argument follows that such an approach to policy presents an overwhelming focus on problem recognition and policy formulation, to the exclusion of other phases of the policy process, such as evaluation and implementation and with a focus on 'efficiency' as the key criterion by which political measures can be assessed (Fay 1975), without recognising that what policy scientists may regard as proof of efficiency or which policy works 'best', necessarily reflects their own views and values. Hence, the argument follows that rather than presenting a value-free process, policy embodies moral choices.

To take this one step further, although a rational model of policy science claims to be non-political and unconcerned with the political views of those who make use of it, it is arguably, inherently ideological. Policy science structures political analysis in certain and definite ways, fostering an attitude to problems that is rooted in the sort of conclusions a policy scientist might propose. In other words, basic social institutions become almost fixed and limits placed on possible political action by restricting the bounds within which an individual can act politically (Fay 1975; Simon 1945). This approach to policy science also unavoidably sustains dominant social groups. For

instance, recent work exploring childcare has drawn attention to the means by which choices made by middle class families (dominated by home-based childcare and private day nurseries), in combination with Government policies of childcare provision based around choice in a market system, allow for access to social networks and relations that in turn generate and maintain class divisions and work to reproduce differential educational trajectories (Ball et al. 2004)

b) Reformulating policy science

The historical search for answers to policy problems led to an increasing awareness of the importance of contextual factors (e.g. bureaucratic and institutional structures, inter-departmental relations across government and wider social and environmental issues) and the development of methodological innovations allowing for evaluation of specific policies. However, these were largely drawn from the same empirically focused epistemologies. Indeed interpretive social science and policy analysis have tended to be seen as fundamentally antithetical enterprises: whereas the latter has drawn on and reinforced traditional, positivist conceptions; the former has largely thrown out positivism as a form of social scientific inquiry. Writing in 1983, Bruce Jennings noted how little constructive dialogue had taken place between the two camps up until that time:

> "...each side has tended to look upon the other with indifference or outright hostility." (page 10).

Despite this, some argue that it is possible to overcome this division and that each camp might benefit from creative engagement with the other's concern. Indeed, around the same time, the role of reason and the interconnectedness between knowledge and politics was increasingly questioned, along with the utility of much empiricist policy research. This led some to look more deeply at the nature of social problems and their epistemological implications for policy science (Mitroff & Pondy 1974).

> "Policy analysis and policy outcome, noted such scholars, were infused with sticky problems of politics and social values. Against this awareness the empiricist emphasis was naïve." (Fischer, 2003:11)

This led to a search for ways of reformulating policy analysis, calling for a greater recognition of policy as social action and incorporating, for instance, more socially relevant (and it might be argued, ethical) approaches. An alternative framework was not

hard to come by: similar debates were occurring elsewhere about the nature of science and the movement from a rational model of decision making to recognising the influence of social factors. This contrast between a rationalistic and constructivist orientation is summarised in Table 1 below. This is not intended to present rationalist and constructivist views as dichotomous or entirely incompatible, nor is it meant to be an exhaustive list, but merely to practically illustrate the tensions and differences between the perspectives. Many of the rationalist concepts of policy in the table have been described in the sections above. A more detailed description of the constructivist concepts is provided in the remainder of this section.

The move away from a model of rational decision making was influenced by the earlier work of late-nineteenth and early twentieth century writers such as Weber who, despite being influential in the development of rational and bureaucratic forms of organisation, also distinguished between 'explanation' (*erklären* in German) as the method of the physical sciences, and 'understanding' (*verstehen*) as the method of the human sciences and that would lead to the discovery of context specific meaning (Fay 1975; Jennings 1983;Yanow 1996). The *verstehen* approach is characterised in the work of other writers, such as Wittgenstein whose *Philosophical Investigations* encourages readers to view language as subject to multiple interpretations as a result of its dependence on the circumstances in which any word is used (Heaton & Groves 1999; McGinn 1997). In this sense *verstehen* explanations consist in demonstrating why a particular act is (or was) performed and this is achieved by exploring the aims of the actor(s) and the wider social context they are situated in. This approach implies a set of *social* rules that guide action and interpretation. For instance, as Fay suggests, one can only be involved in 'buying' and 'selling' if rules of economic behaviour exist (1975). These social rules constitute the shared assumptions, definitions and conceptions that structure our social world.

Table 1: Conceptions of policy

A RATIONALIST PERSPECTIVE MIGHT VIEW POLICY AS....	A CONSTRUCTIVIST PERSPECTIVE MIGHT VIEW POLICY AS....
...problem recognition	...problematic, a reality construction
...a label for a field of activity	...a story
...a rational or technical plan	...a symbol or signifier
...a proposal or formula	...a rhetorical or literary device
...an objective solution	...a speech act
...a reasoned choice between alternatives	...a means of dealing with uncertainty
...involving discoverable laws	...a letter, advertisement or annunciation
...an expression of general purpose or desired state of affairs	...justification for intended action
	...a contract or negotiation
...due bureaucratic process	...emergent and responsive
...administration	...temporal
...a structural intervention	...the restitution of social drama
...a theory or model	...connected to other policies
...stagist or cyclical	...meta-narrative
...an output or outcome	...practice or action
...factual	...involving (moral) choices
...the 'truth'	...involving multiple perspectives
...government decisions	...presentation of corporate self
...formal authorisation	...an instrument of power/resistance
...the 'view from nowhere'	...ideology

c) Policy in action

Even though a social constructivist perspective is acknowledged by some as a viable theoretical option, it continues to be widely contested and hence still not widely applied. But as a theoretical perspective, it has continued to develop (Fischer & Forester 1993; Russell & Greenhalgh, submitted) and has informed work such as the study of scientific discourse undertaken by Gilbert and Mulkay (1984). They approached the world of science as a social world and one with multiple realities. Rather than resorting to the traditional goal of producing a single coherent account of the patterns of action and belief in science, they documented some of the means by which scientists construct and

reconstruct these actions and beliefs in diverse and varied ways (Gilbert & Mulkay 1984). They showed how scientists use a range of distinctive, and often contradictory, interpretative forms in different social contexts, with one account used in their formal writing for justifying 'facts' and another in more informal conversation to account for why competing scientists were in error.

Other notable examples of such work applied to the policy world include that uncovering the competing political interests inherent within environmental discourses (Hajer 1995); that evaluating community centres in Israel and showing how public policy is often ambiguous and has different meanings for different social groups (Yanow 1996); and that exploring the means by which political leaders, social problems and power relations are constructed and maintained in modern democratic society (Edelman 1985; 1988). Much of the following theoretical and methodological discussion draws on the work of such writers and the recognition that the discovery of context specific meaning associated with *verstehen* leads to the possibility of multiple meanings and interpretations:

> "There are the possibilities of miscommunication and noncommunication, of meanings that are shared or not shared, of meanings once shared that are later dismantled." (Yanow, 1996: 7)

From this perspective, the model of evidence-based policy (described above) is problematic in the sense that it does not recognise or appreciate:

> "...the complexity of the policy process and the diversity of the kinds of relevant evidence." (Klein, 2003: 430)

In particular, critics argue that the kind of techniques used in evidence-based medicine are not applicable to the inherently social processes of policymaking, where different types of policy and different stages of policymaking call for different types of evidence (Black 2001; Cummins & Macintyre 2002; Greenhalgh 2004). Indeed, what counts as 'evidence', is itself a contentious issue. Problems of public policy are inherently social and complex and hence coming to policy conclusions is not a merely a process of reading off simple prescriptions from evidence (Klein 2003), but should be based on appropriate models of social understanding (Williams 2002). Indeed, one of the most consistent features within policy analysis is that:

> "...any understanding of the role of knowledge and evidence in policy processes requires an understanding of how knowledge is articulated through relations of power." (Tenbensel, 2004: 190)

Tenbensel goes on to cite a number of frameworks that have used power relations as their initial starting point of enquiry including those drawing on policy networks (concerned with relational aspects of policymaking and the networks of formal and informal contacts that influence policy agendas and processes); policy streams (concerned with the evolution of policy agendas where solutions search for problems and outcomes are shaped by a mix of problems, participants and resources (Parsons 1995)); and advocacy coalitions (concerned with policy subsystems that vary in terms of their beliefs and resources, but remain dominated by elite opinion).

d) Policy analysis and health research

In this light, the relationship between different knowledge sources is defined by political context. Hence, rather than being rational and linear, policymaking is, in practice, iterative and subject to value judgements (Harries, Elliot, & Higgins 1999; Sanderson 2002; Williams 2002). The same logic applies to research itself. Hence, the two should not be expected to link with each other in a straightforward manner (ibid). This is demonstrated in a recent evaluation of Health Action Zones, which concluded that their demise was not based on the findings of evaluations, but has been subject to a range of wider political issues[9]. In addition, there is considerable literature illustrating the difficulties in the dissemination, utilisation and implementation of findings of research (Hanney et al. 2003; Harries, Elliot, & Higgins 1999; Petticrew et al. 2004;Weiss 1979; Whitehead et al. 2004).

A critique of the rational approach to policy decision making, summarising much of the discussion throughout this chapter, is presented in Box 2. This is further illustrated by a recent exploration of the use of evidence and assumption in health-related policymaking. Cummins and Macintyre take the example of 'food deserts' – poor urban areas where residents cannot buy affordable, healthy food - to demonstrate how ideas become reported and repeated and then accepted as fact, even though they may not be

[9] Health Action Zones are area-based initiatives designed to bring together a range of NHS and other organisations to address and improve the health of local people. Wider political issues affecting their demise included the speed of the policy process (which meant that the second wave of HAZs was introduced without any clear evidence that the first wave of HAZs had met clear targets) and insufficient resources for evaluation of complex organisational interventions.

true (Cummins & Macintyre 2002)[10]. Greenhalgh et al (2004) explore decisions about the potential benefits and harms of medicines to describe a number of non-rational influences[11].

Box 2: Critique of rational decision making

- Choices are made at the margin of the status quo.
- Social problems are seen as stresses to be overcome rather than goals to be achieved.
- Only a limited number of options are considered, none of which move very far from established procedures. As a result only a limited number of consequences are possible and subsequently evaluated.
- Ethical and moral issues faced by policymakers are often reduced to questions of 'best evidence'.
- 'Evidence' from research is seen to be value-free and context-neutral; and considered of greater value than 'evidence' from personal experience or opinion.
- Analysis and evaluation occur sequentially, so policy becomes the unanticipated result of repeatedly narrow choices.
- As a result of the process of policymaking, social problems that have been identified are transformed to 'fit' organisations directives.
- Policymaking is dispersed throughout political institutions, impeding thoughtful, comprehensive and co-ordinated overview of inter-related problems.
- Thoughtful use and application of findings from diverse areas of research is often assumed to be unproblematic.

Adapted from Williams (2002) and Russell and Greenhalgh (submitted)

[10] They trace the development of the term 'food deserts' from initial use by a resident of a public sector housing scheme, through to use in a government report, a high profile speech, publication in the media and ultimately, popular usage in the world of health and food policy. This led them to a number of conclusions including the unquestioning acceptance and use of 'facts' by policymakers and the varied demand for evidence according to perceived fit with prevailing collective world views about issues of popular topical interest.

[11] Although regulatory decisions are presented by authorities as rational, authors describe a number of non-rational influences such as, the framing of information in such a way as to suggest a treatment saves eight out of ten lives, rather than loses two out of ten; illusory correlations based on prior beliefs rather than current data; or the preference by most people to maintain the status quo rather than change behaviours even when 'objective evidence' is presented of potential benefit changes (Greenhalgh; Kostopoulou; & Harries 2004). They conclude that the evidence base for drug regulatory decisions is to some extent socially constructed through active and on-going negotiation between patients, practitioners, and policymakers, an argument supported elsewhere (Lomas 1997).

This critique of rationalist policy suggests that the application of evidence-based policy is perhaps more useful in some areas than others. For instance, in their study of Canadian provincial policymaking, Lavis et al (2002) found that professional or technical content driven decisions may be more amenable to the influence of research than large-scale decisions concerned with assigning responsibilities; drawing attention to the need for careful consideration of the types of policy that might be influenced by research. Other studies have cast light on when and how political considerations influence the use of data in the policymaking process and have found that, for instance, investment in data collection and analysis for politically sensitive policy decisions may be wasted as decisions are based on the result of political preferences (Schwartz & Rosen 2004); moral values often come into play in what is presented as a neutral or value-free process (Biller-Adorno, Lie, & Ter Meulen 2002); or policy actors have a vested interest in particular outcomes (Wildavsky 1979).

2.5 Summary

In this chapter I have described a traditional approach to public policy development and analysis that has its roots in rational approaches to knowledge and inquiry and is embodied in the evidence-based practice movement. In order to challenge this narrow approach I have described the growing literature around constructivist approaches to public policy that acknowledge the wider social and political contexts in which policy develops. I have contrasted these different approaches and used a number of practical examples – grounded in the academic and policy literature - to demonstrate how considering policy from the perspective of social constructivism can shed light on the influence of a range of social and political values, interests and contexts on research policy.

* 3 *

POLICY AS DISCOURSE

3.1 Introduction

This section has so far described how policy is conventionally described in instrumental terms as a strategic intervention to resolve a problem and analysed objectively in terms of efficiency or effectiveness. However, this approach neglects the notion that policy is determined by its relationship to a particular situation, social system or ideological framework and represents a struggle over ideas and shared meanings. This constitutes a social constructivist approach to policy analysis: focusing on the meaning of policies, on the feelings, values and/or beliefs that they express, and on the process by which these meanings are communicated to and interpreted or understood by various audiences (Fischer 2003;Yanow 1996; Fischer & Forester 1993). From this perspective, interpretations are more powerful than facts (Stone 2001).

The aim of such an approach is to demonstrate the interconnectedness among various conventions that make up the social and political context within which actions take place. Such an approach has particular relevance to policy analysis due to the focus on the policy agenda-setting process, acknowledging that social problems become identified and addressed through the varied activities of different interest groups. This chapter will describe the theoretical traditions that have influenced this constructivist approach, placing particular emphasis on policy as discourse.

3.2 The Discursive Construction of Reality

In seeking to explain the political context of policymaking, a number of approaches have emerged into the realms of policy analysis, influenced in particular by poststructuralism. One such approach is that of discourse theory, which starts from the

premise that all actions, objects and practices are socially meaningful and that those meanings are shaped by the social and political struggles in specific historical periods. From this perspective, policy discourses are transmitted via a range of linguistic and non-linguistic materials including verbal statements, documents, historical events, interviews or ideas, and actions – what contemporary poststructuralists might refer to as texts. In modern society, individuals and groups may engage with these discourses in any number of ways, including direct contact or observation; or through media, such as newspapers, television and radio. Discourse theorists argue that the means of transmission and the mode by which people engage with this will also affect the meaning attached to it. They also argue that transmission can happen at a number of different levels, often interconnected: at the micro linguistic level (e.g. via intonation or use of rhetoric in political statements or press releases) through to macro transmission of basic values at a broad cultural level (e.g. the re-definition of Labour policy according to Third Way politics in the run up to the 1997 general elections (Fairclough 2000b)).

a) The importance of language

A discursive perspective views the study of political ideas as the study of language. In this sense, it is through language that politicians and policymakers can communicate ideas, promote policies and persuade the wider population of their legitimate claim to power. It was Saussure who argued in his *Course in General Linguistics* (1966) that words cannot be separated from thought or ideas. His work forms the basis of structural linguistics and, as well as recognising the need for signs to be able to make clear and consistent distinctions between different ideas, he described thought without language as 'vague, uncharted nebulae' because, he argued,

> "...there are no pre-existing ideas, and nothing is distinct before the appearance of language." (1966: 112).

To support this view he points to the different meanings that are attached to words across languages, arguing that words are not pre-existing concepts with historically assigned meaning. Instead – and quite radically at that time – Saussure viewed language as a social phenomenon with words having different meanings in different contexts. For example, unlike many other languages, Mandarin has no tenses as such but relies on intonation in order to convey temporal meaning so that what might seem a simple

phrase in modern English, such as "I go shopping", can mean many things in Mandarin depending on the way it is intoned. As a consequence of the potential for multiple meanings to be attached to words, Saussure argued that the uses of language cannot be the object of a science, but rather that linguistic science must concentrate on the underlying system, which enables every use of language to be meaningful. This latter claim has been vigorously challenged. For instance, Bourdieu has argued that Saussure's approach treats language as

> "...an object of contemplation, rather than as an instrument of action and power." (1991: 37).

I now turn to consider linguistic interaction as relations of power.

b) Discourse as practice

Another interpretation of the relevance of language to policy and politics focuses on the link between language and power. Here, language is not only viewed as a social phenomenon, but when used in the realm of politics, it has the potential to become an instrument of power. In this sense politics is a social practice, with language a tool to shape politics and events and playing a fundamental role in the production of reality for political purposes. The study of political language is therefore seen by some theorists as providing valuable information about the intricacies of the exercise of power.

This approach has been heavily influenced by the work of French philosopher Michel Foucault, who was primarily concerned with the transmission of discourses at a societal level. He argued that language does not reflect systems of domination, but rather:

> "Discourse in not simply that which translates struggles or systems of domination, but is the thing for which there is struggle. Discourse is the power to be seized." (cited in Shapiro, 1984:110)

In other words, the exercise of power takes place in the linguistic field. This type of approach has been adopted by a number of theorists including Edelman (1985; 1988; 1998), Fairclough (1992; 2000a; 2000b; 2001), and Baachi (2000), all of whom are concerned with the capacity of language to reflect ideology, to confound and distort. One example of this is the work of Chambon who refers to social workers sifting through the evidence of clients' lives:

> "They assess, weigh and discard sets of information. As they collect data, they simultaneously draw inferences and interpret their findings." (Chambon 1999:61)[12]

In a similar way, it is possible to view, for instance, primary care practitioners as sifting through the health and social practices of patients' lives.

c) Development of discursive formations

Whereas Kuhn introduced the concept of paradigms and a linear and progressive shift of paradigmatic thought (Kuhn 1962); Foucault introduced the concept of *epistemes*: periods of history organised around their own specific worldviews. Unlike paradigms, the rise and fall of epistemes does not correspond to any neat narrative of origin, development, continuity or progress (Danaher, Schirato, & Webb 2001). Instead Foucauldian thought challenges the notion that 'what we are' can be traced back to some original moment or event, with no epistemic period being entirely consistent and with both continuity and discontinuity between epistemes. One example of this is Foucault's work on how discourses of madness have changed over time, which reveals how, in the early medieval period, the mad were not perceived as threatening but almost as possessing inner wisdom (Danaher, Schirato & Webb 2001). Contrary to this, twentieth century discourse views madness as an illness, increasingly under the 'medical gaze' and requiring medical treatment.

According to Foucault, the organising principles of epistemes are 'discursive formations' which make speech possible, organise ideas or concepts and produce 'objects of knowledge' (Foucault 2002). The close examination of language therefore allows us to see that sets of statements follow certain rules, share a common logic and vary historically as distinct 'discursive formations' that we find around certain societal themes such as madness or sexuality. For Foucault then, discourses are:

> "...practices which form the objects of which they speak" (1972: 49)

[12] Chambon describes a particular reading of the work of Foucault in relation to 'making the familiar visible' in social work practice. He argues that by paying more attention to the least expected, or taken-for-granted, features of people's lives, social workers might bring out unexpected details or open up new lines of inquiry.

This highlights the relationship between discourses and the social world we inhabit. Similarly, the discourses associated with primary care research that I examine more closely in section four can be seen as part of such a discursive formation.

d) Discourse, knowledge and power

From a Foucauldian perspective, discourses regulate knowledge of the world, our common and epistemic understanding of events and the world around us. These shared understandings then describe and inform social practices, thereby highlighting a close relationship between discourse, knowledge and power[13]. This is illustrated by Edelman in describing the often mythical and rhetorical nature of political language:

> "If political language both excites and mollifies fears, language is an integral fact of the political scene. It is not simply an instrument for describing events, but is a part of events, strongly shaping their meaning and the political roles, officials and mass publics see themselves as playing. In this sense language, events and self-conception mutually define each other." (1998:131-2)

Foucault was centrally concerned with this relationship between discourse, power and knowledge, as are other writers such as Fairclough and Parker. They argue that political language is a form of exercising power, because language is ideological in nature and therefore unable to transmit disinterested perceptions of the world (Fairclough 2001). Instead, language shapes perceptions, reactions and therefore practices. In a similar vein, Edelman argues that language is a necessary catalyst of politics as politicians use language to sanctify politics (Edelman 1985; 1988). In this sense, he argues, the use of language as an instrument of power can be more effective than the use of force.

e) Policy as symbolic action

Lastly, policies act as signifiers in that they point to one or more specific characteristics, as opposed to others (Fischer, 2003). Policy therefore has the potential to draw attention to the need for research focused on, for instance, cancer services or genetic engineering, whilst diverting attention away from other potential areas, such as multiple sclerosis or schizophrenia. In this sense, policies can suggest or signify to wider society which

[13] A range of approaches has also developed under the encapsulating term of postmodernism. Lyotard argued that the status of knowledge has altered with the advent of the post-industrial and post-modern age (Lyotard 1979) and pointed to the general paradigm of progress in science and technology as linked to economic growth and the expansion of socio-political power.

individuals or groups are virtuous and which are unsafe; which activities will be punished or penalised and which will be encouraged and rewarded. Furthermore, some areas of public life can become immune from policy, unable to get onto the political agenda and hence treated as 'non-problems' and this prompts questions about the role of the state in maintaining or threatening dominant power relations.

3.3 Summary

In this chapter I have built on the earlier critique of rationally conceived policy to argue for a more socially relevant approach to the study of policy. I have introduced discourse theory, described its relevance to policy analysis, and highlighted the policy process as a struggle for the determination of shared meanings. I have described how policy is constituted in language and discourse. It involves moral choices with different individuals or groups potentially perceived as 'deserving' and 'undeserving' in policy terms and having consequences for subsequent action or inaction.

* 4 *

METHODOLOGICAL CONSIDERATIONS IN CHALLENGING A RATIONAL POLICY APPROACH

4.1 Introduction

The preceding chapters have 'set the scene' in terms of the need to explore the role of discourse – as a form of social practice and mode of action - in order to a) more fully appreciate the construction of primary care research and b) to challenge a rational approach to policy. Instead of seeing ideas as one of the many variables influencing politics and policy, this approach sees language and discourse as having a more underlying role in structuring social action. It moves beyond the structuralist approach to the study of language advocated by Saussure (1966) and favours analysis of social context. Underpinning this, is the idea that language not only reflects society, but also contributes to the development of values and perceptions (i.e. language reflects social and political contexts, with social and political contexts also shaped by language). However, discourse theory is a diverse and broad-ranging field. In the following sections, I therefore consider the relevance of different theoretical and methodological approaches to the discursive study of primary care research policy.

4.2 Different Approaches to Exploring Discourse

There is an overwhelming sense of confusion within the existing literature as to the defining characteristics of discourse analysis (Antaki et al. 2003). There have been a number of attempts to characterise the range of approaches to discourse analysis and to capture a range of disciplines and traditions (Atkinson & Coffey 1997; Jupp & Norris 1993; Murphy E et al. 1998; Silverman 1997; 2000). Approaches include, among others:

> "...semiotics and deconstruction, from linguistics and literary theory, for the analysis of written language; ethnomethodology and symbolic interaction, from social psychology, for the analysis of conversations, interviews and interpersonal or group-based roles; dramaturgy, from both literary theory and social psychology, for the analysis of acts, settings, and roles; human or social geography, from geography, urban planning, and architecture, for the analysis of physical objects, such as built spaces." (Yanow, 1996:43)

The commonality amongst approaches is the universal attention to the significance and structuring effects of language, and the association with interpretive styles of analysis (Burman & Parker, 1993). In addition, texts are considered to be discursive units that can be systematically investigated (Hardy 2004). Rather than adopting a narrow view of discourse such as that of Potter and Wetherall (1987) who simply refer to all formal and informal spoken interaction and written texts, I subscribe to the view that discourse comprises sets of statements that bring social objects into being and emphasise the broader aspects of texts beyond written and spoken word (e.g. graphics) (Burman & Parker 1993; Parker 1992; 2002). Throughout the remainder of this thesis, I therefore use the term 'text' and 'discourse' in this broadest, unless otherwise stated.

a) Content analysis

One approach to exploring discourses is simply to extract basic descriptive information about the documents (Abbott, Shaw, & Elston 2004). Content analysis would be a typical strategy to use, viewing texts as an objective means for making inferences about the realities that they claim to represent. This approach offers a systematic approach involving counting the incidence of particular items belonging to a set of predetermined categories, and often provides a quantitative summary of how often identified themes or specified words appear in documents (Bryman 1989).

The methodological principles underlying this approach have been criticised, not least because of a focus on the contents of those texts being analysed, rather than making any attempt to uncover deeper levels of meaning (Jupp & Norris 1993). Content analysis adopts an unquestioning stance towards the contents of documents as a means of maintaining existing social relations and is therefore concerned with manifest and surface meaning only (Murphy et al. 1998). But this does not mean that the method is not valuable in specific circumstances: for instance, Schofield began a content analysis

of health authority and local authority purchasing plans by noting the selection and frequency of words used (Schofield 1997). These were then grouped into 'content categories', which were inferred from the complete texts of the documents that were, in turn, collapsed into three dimensions of underlying meanings (in this case, priorities, incentives, and governance structures). However, such an approach does not provide a socially relevant approach to policy analysis that must necessarily include the objectively oriented goals, motives and intentions of policymakers. As such it must be grounded in constructivist analysis. This is not to argue that empirical research is redundant but, as Fischer states:

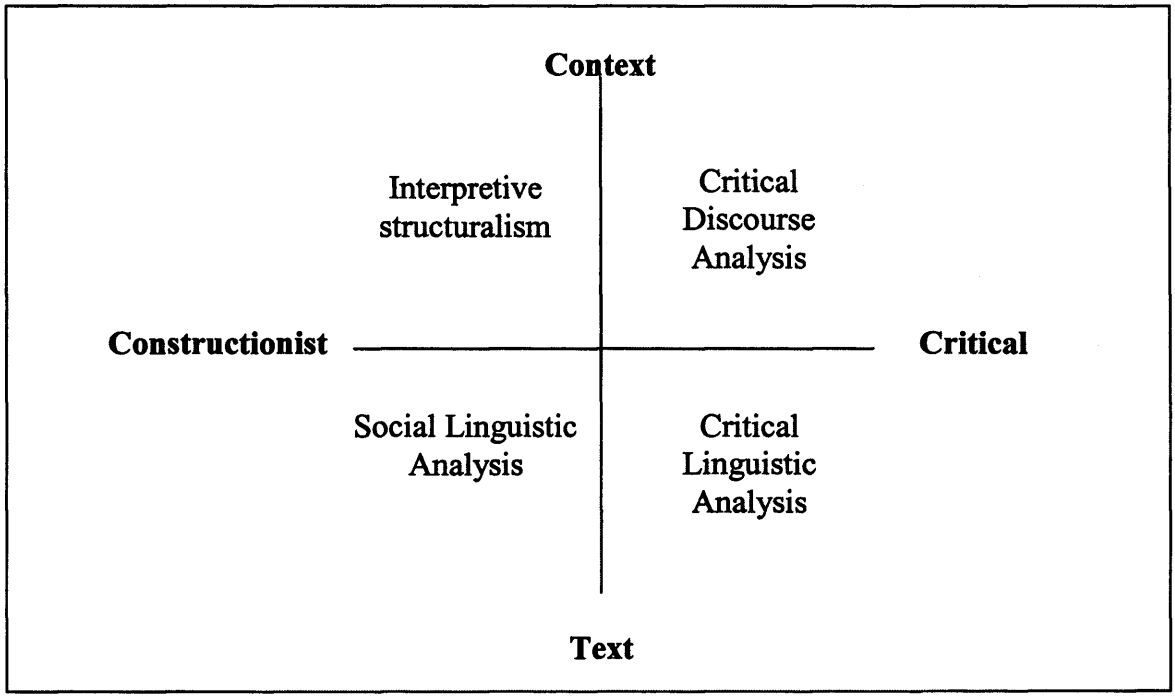
> "...empirical research should be embedded in an interpretive oriented discursive perspective." (2003:69)

b) Qualitative, discursive analysis

A socially relevant approach to discourse analysis can be seen as a qualitative method that illuminates the processes whereby reality comes into being, rather than simply examining how individuals make sense of a pre-existing reality (Phillips & Hardy 2002). It is this discursive approach, rather than content analysis, that appears most relevant in exploring the construction of primary care research policy, as it combines a set of epistemological assumptions with particular analytic techniques (Parker 1992; Phillips & Hardy 2002) and attends to the linguistic resources by which the socio-political realm is (re)produced (Burman & Parker 1993)

Phillips and Hardy (2002) have attempted to capture the range of theoretical positions within this discursive approach. Their diagram is reproduced in Figure 1 and may be criticised as it attempts to categorise discourse analytic approaches and divert attention from the diversity constituted within the social world. Although they emphasise the wide range of locations on which discourse analysts may rest and acknowledge the benefits of exploring both text and context; by situating discursive approaches in different philosophical realms that appear incompatible, the potential for drawing on a range of theories is problematic. An alternative useful means of interpreting their diagram is to see these classifications as ideal types: where discourse analysts may ideally position themselves theoretically in order to try and proceed with the work at hand.

Figure 1: Approaches to discourse analysis[14]



A more useful position that avoids imposing such a model might be to describe a number of *reference points*. This is an idea developed in the work of Burman and Parker (1993) who draw attention to the lack of any coherent unitary theoretical positions or types of discourse method and instead describe:

> "...clusters of writers and examples of research that are used as references to support the description and commentary on a report" (page 3).

Burman and Parker have developed a taxonomy of three broad reference points – conversation analysis, linguistic analysis and poststructuralism - in attempting to provide an overview of the methodological approaches to discourse analysis. These are described below.

ii) Conversation analysis

Conversational analysis has its origins in ethnomethodology, which views the discernible structures of the world (e.g. social class, the family) as produced through cultural and interpretive practices that people collaboratively use to make sense of the world. The approach was initiated by Garfinkel (1967) who viewed social order, not as

[14] I use the term constructionist (as opposed to constructivist) within this figure as this reflects the original diagram produced by Phillips and Hardy. See the footnote on page 40 for the reasoning behind the differentiation adopted here.

an abstract set of constraints, but as an ongoing accomplishment of individuals acting together.

The task of the sociologist is to tap into methods that members of a society use to display to each other their common-sense understanding of the social categories and identities to which they belong, a process referred to as ethnomethodology (Garfinkel 1967). In this sense, language is important as a cultural resource through which social order is produced. Ethnomethodology criticised mainstream sociology for treating language as a transparent medium for expressing social categories and overlooking the role of language in creating and maintaining social realities. Garfinkel and his followers instead see language as having meaning independent of the specific contexts in which they are used. And, furthermore, the context is constructed through the talk that refers to it. Hence, from this perspective, for a researcher to believe that they have uncovered the sets of linguistic terms or repertoires that govern what people say, is also to do violence to what people actually say (Burman & Parker, 1993).

Conversational analysis developed as a specific branch of inquiry of ethnomethodology, focusing on the finer details of conversation. One prominent example of his work is the identification of *membership categorisation devices,* used by speakers to allocate people to a particular role or roles (e.g. lecturer, student, researcher, policymaker) and hold them accountable for the obligations that arise from this (MacLure, 2003).

Conversational analysis has lent itself to exploring certain specific healthcare encounters such as doctor-patient communication in the consultation (Drew, Collins, & Chatwin 2001); the use of structured health needs assessment tools in general practice (Mitcheson & Cowley 2003); and the sociological and social psychological aspects of youth subcultures (Widdicombe 1993). Characteristics of conversational analysis and ethnomethodology bear some resemblance to poststructural notions of the textual nature of reality, outlined in chapter 3 and described in further detail below. However, the emphasis on 'members' competence' as constructors of their own social worlds carries:

> "...notions of mastery of the social world that would trouble poststructural notions of discourse" (MacLure, 2003: 190).

As such, this approach does not appear suitable for analysis of policy as the focus is wholly on interaction within the social world, which renders it incapable of addressing issues of power, political structures and institutions.

i) Linguistic analysis and interpretive repertoires

Whereas a traditional linguistic approach might focus on grammatical rules for constructing sentences, a linguistic analysis aims to describe the organisation of language 'beyond the level of the sentence' (MacLure 2003), investigating rules and conventions for constructing extended sections of talk. There is an assumption here that:

> "...language exists as an abstract system, which is then mobilised in specific contexts, according to certain rules and conventions, to achieve a range of communicative or practice purposes." (MacLure, 2003:182).

This suggests that linguistic discourse analysis still operates largely within a structuralist mode of knowing and acting, where the boundary between language and the 'real world' is secure, and discourse is conceptualised as rule-governed, systematic and logical.

This approach has been popularised by British social psychologists from the end of the 1980's. The focus has largely been on spoken language, rather than written word, and on grammatical construction, rather than discourse as implied social relationships. Billig (1988) and Potter and Wetherall (Potter 1996; Potter 1997; Potter & Wetherall 1987) have been particularly influential, adopting a micro-linguistic approach to the study of discourse as a way, for example, of analysing the pattern of everyday conversation amongst individuals in different situations (e.g. family). Potter and Wetherall make use of the term 'interpretive repertoires' as a means of helping to identify and analyse interpretive or linguistic resources. These are:

> "...systematically related sets of terms, often used with stylistic and grammatical coherence...[that]...make up an important part of the common sense of a culture; although some may be specific to certain institutional domains." (Potter, 1996[15]).

[15] This is drawn from Potter's electronic version of the chapter without page numbers. The quotation can be found under the heading 'What are interpretive repertoires?'

One example of this approach is the work of Gilbert and Mulkay exploring scientists' interpretive repertoires (Gilbert & Mulkay 1984), described earlier in Chapter 2 (see page 35).

Repertoire analysis is not necessarily regarded as the main task of discourse analysis and is increasingly supplemented by studies exploring the way specific actions are accomplished. Other language characteristics and stylistic conventions that may be considered in exploring texts may include layout (e.g. the use of bullets and lists to portray some implicit idea of order and importance (Atkinson & Coffey 1997)); use of metaphor, simile, allegory and imagery (Marston 2000); and the use of rhetoric in constructing and supporting arguments (Billig 1988; Edwards & Potter 1992; Harper 2004). The use of language can therefore be regarded as a device used to construct a distinctive mode of, for instance, documentary representation. To illustrate this, Atkinson and Coffey argue that:

> "One can often recognise what sort of document one is dealing with simply through a recognition of its distinctive use of language...we know for instance, at a common-sense level, that official documents, reports, and so on, are often couched in language that differs from everyday language use" (1997:49)

Rhetorical analysis explores how, for instance, social categories are constructed and maintained. The study of rhetoric was revived in the 1970s and 80s with a particular concern for the argumentative organisation of texts and the different rhetorical forms used to make them persuasive. Since this time, a number of writers have explored the use of rhetorical devices used in different situations to enhance the plausibility of certain statements and claims (Harper 2004). Edwards and Potter (1992) describe a number of such devices, outlined in Box 3. Rhetorical analysis has been used, for instance, to gain insights into the assumptions guiding the development and presentation of mental health legislation (Harper 2004).

There is some similarity between this approach and conversational analysis however, each emphasises a different aspect of interaction, with conversational analysis exploring sequential organisation of talk over the course of an interaction and rhetorical analysis focusing on argumentation and the relationship between opposing positions.

Box 3: Rhetorical devices used in fact construction

1. **Category entitlement**: People in certain positions are expected to have certain kinds of (expert) knowledge.
2. **Vivid description**: The use of lots of concrete detail in an account.
3. **Narrative**: An account that leads "inevitably" in a causal sequence, adding to the plausibility of a report in a context of deniability.
4. **Systematic vagueness**: Vague global formulations with enough essentials to found an utterance but preventing the easy undermining that a lot of detail might allow.
5. **Empiricist accounting**: Objectifying scientific language where phenomena are treated as agents in their own right whereas people are seen as passive agents.
6. **Rhetoric of argument**: Constructing an account in the form of a logical argument so that the outcome is seen as the result of something external to the speaker (that is, the logical outcome of the argument).
7. **Extreme case formulation**: Versions made more effective by drawing on extreme examples (the use of a 'straw man' argument is one example of this).
8. **Consensus and corroboration**: Making an account plausible by noting agreement between (ideally independent) witnesses.
9. **Lists and contrasts**: Very effective in oratory. Three-part lists can seem complete or representative – often using "distinctiveness information".

Adapted from Edwards and Potter (1992)

Interpretive repertoires are distinct from more Foucauldian notions of discourse, described in the following section, which have been criticised for a distinct lack of emphasis on grammatical coherence, concentrating instead on overarching socio-cultural concepts. Likewise, a central criticism of linguistic analysis from the perspective of poststructuralism and 'critical linguistics' (see section below) has been that the discourses are not linked to societal structures in any systematic way (Fairclough 1992a; 1992b). Indeed, such an approach is criticised because of its primary emphasis on grammar (Macnaghten 1993), with poststructuralists arguing that the approach does not take account of political, ideological, cultural or economic dimensions.

> "Discursive constructions obviously use grammar but what lies central to each construction is not the use of the same grammatical terms but the social relationship encapsulated by these terms, the outlook they engender, and the

> activities they legitimate (whether these will be achieved or not depending, however, on the process of argumentation)." (Macnaghten, 1993: 55)

Hence, although attention to rhetoric appears relevant in terms of elucidating the means by which arguments are constructed, it appears that linguistic analysis does not relate clearly to interpretive policy analysis and the concern with societal structures, processes and meanings. Indeed, Fairclough argues that this approach does not show how discourse is shaped by relations of power, or the constitutive effects that discourse have upon social identities, relations and beliefs.

Taking this one step further, linguistic discourse analysis has also been accused of a certain naivety in theorising social concepts. For instance Poynton (2000: 27; cited in Maclure 2003), charges linguists with borrowing terms from across disciplines, whilst lacking any sustained engagement with social theory. However, linguistic discourse analysts charge poststructural analysts with lacking the linguistic resources for analysing texts and failing to anchor their descriptions of societal discourses within talk itself.

iii) Discourse within poststructuralism

A poststructural approach has been described in previous chapters as being opposed to a conventional, rational view and embracing a loosely connected body of work often associated with such names as Derrida and Foucault. Poststructuralism rejects the idea of universal truth and objective knowledge, instead asserting that truths are always partial and knowledge is always situated. Hence, from this perspective, subjects are constituted within discourses that establish what it is (im)possible to be (e.g. wife, husband, doctor, researcher, policymaker); and what will count as truth or knowledge. Therefore, discourses are regarded as:

> "...practices that systematically form the objects of which they speak." (Foucault, 1972:49).

One means of distinguishing this from linguistic analysis is in terms of the distinction between a macro and micro focus. Poststructuralism has generally concerned itself with societal discourse, rather than paying attention to the specifics of actual texts, thereby focusing on macro socio-cultural relationships. Fischer argues that such discourses

facilitate transmission of basic values at a broad cultural level, providing cohesion to shared beliefs. This is illustrated by the example of Christianity in Western countries:

> "In Christian cultures, the most profound illustration is the story of Jesus of Nazareth, which provides insights for all members of society, even including people who are not especially religious. Such discourses convey to society its basic socio-cultural identity, that is, where it comes from, how it got there, and what its goals and values are." (Fischer, 2003: 75)

At this societal level, discourses provide the basic principles for organisation of social action. Individuals understanding of reality is organised without them necessarily realising it, and this serves to structure basic social definitions, meanings and interactions. Hence:

> "...as large encompassing systems of meaning embedded in and transmitted by culture, macro discourses constitute the 'residua' of a society's or group's collective memory." (Fischer 2003: 75).

It is through this process of discursive organisation that social reality becomes constructed. It involves differentiating, naming, classifying and relating through language use, which is in turn influenced by discursive organisation. Examples of work that have adopted this approach includes the exploration of the functions and socio-cultural meaning of political language (Edelman 1977; 1985; 1988).

Foucault emphasises the means by which the forms of language available to us set limits, not only upon what we think and say, but also what we can do or what can be done to us (Foucault 1973; 2002). A Foucauldian approach views discourses - practices that systematically form the objects of which they speak - as inextricably linked to institutions such as law, family or medicine, and to disciplines that regularise and normalise the conduct of those who are brought within the scope of those institutions, such as the medical profession, psychology or biological science. Hence, the discourses used within institutions, not only delineate what is possible to say, know and do, but also establish what an individual is entitled or obliged to 'be'. For instance, an individual who visits the general practitioner as a result of feeling unwell is obliged to assume the role of patient. From this perspective, it is impossible to speak without speaking as the kind of person who is invoked by one discourse or another. As a result, the individual is 'fabricated' into the social order (Foucault 1979).

Poststructuralists argue that language constructs the people who use it, a view that contrasts with the widely accepted belief that people construct the language they use. Discourse therefore involves much more than language and incorporates practice (or *praxis*). Objects and events come into existence as meaningful entities through their representation in discourse and can therefore be regarded as practices for generating meaning, forming subjects and regulating conduct within particular societies, at particular historical times. Foucault uses the term 'archaeology' to refer to the process of working through the historical archives of various societies to bring to light the events that have produced the fields of knowledge and discursive formations of different historical periods (Foucault 2002).

This is not to suggest that language itself is not important: quite the opposite. For instance, Edelman describes how, for every political problem, there is also a set of statements and terms constantly in use:

> "In accepting one or another of these texts a person becomes a particular kind of subject with a particular ideology, role, and self-conception: a liberal or a conservative, a victim of authority or a supporter of authority, an activist or a spectator. But the choice between available language forms is itself constrained rather than free." (1988:112).

Edelman and others refer to the use of symbols as a crucial means of transmitting and maintaining discursive organisation: symbols might by transmitted in any number of number of ways such as, names of organisations or programmes of work (Yanow 1996); buildings or physical spaces; traditions, rituals and ceremonies (Geertz 1973a); medical prescriptions (Cohen et al. 2001); and so on. Applied to the area of policy, the movement of a policy through official organisations like the Department of Health, parliament and/or legislature provides a means of representing the ideals of democratic government, such as equality. This transmits to 'the public', a discursive message about government consideration of citizens' concerns and demands. However, this is not to suggest that political symbols are in any way a coherent set of linguistic categories that are understood in the same way by everyone, but that social reality reflects a collection of symbols and meanings that are interpreted in different ways by different people for different reasons.

However they are transmitted, poststructuralism views discourses as invested with power and knowledge. Foucault often bound the two terms together - as power/knowledge - to indicate their interdependence. From this perspective, knowledge cannot be produced without recourse to a system of communication and language, which is a form of power. In turn, no power can be effected without recourse to knowledge. Foucault's main interest rests in exploring how meaning is produced by power/knowledge compositions that are embedded in modern sciences, such as medicine or sexology, and how the production of truth is then governed by the rise of affiliated institutions, such as the hospital or asylum. Hence, as was described at the beginning of this section, the discourses used relate to social institutions and, in doing so, map out what can be said and thought within defined areas.

Power in the Foucauldian sense, is not something that is held or owned by one person or group, but is diffuse: a ubiquitous, ever-changing flow (Danaher, Schirato, & Webb 2001). The way in which power moves around depends on how different groups, institutions and discourses negotiate, relate to and compete with one another and are made subjects (e.g. doctors, patients) through their involvement in discourse (Foucault 1980). As there are so many competing ideas, institutions and discourses, no single authorised truth ever emerges:

> "Each society has its regime of truth, its 'general politics of truth': that is, the types of discourse which it accepts and makes function as true; the mechanisms and instances which enable one to distinguish true and false statements, the means by which each is sanctioned; the techniques and procedures accorded value in the acquisition of truth; the status of those who are charged with saying what counts as true." (Foucault 1980:31)

However, importantly, power can become concentrated in the hands of certain groups or at the expense of others according to, for instance, social class, sexuality, gender or ethnicity. This concentration of power is then directly linked to discourse practices, for instance, in doctor-patient interaction within the hospital setting or between government officials and university-based researchers in negotiating areas of work and financial support.

The social and economic benefits that come from access to mainstream discourses are not evenly distributed (MacLure 2003), but tend to fall along lines of the social

categories mentioned above, as well as others such as age or religion. However, this process encompasses more than simply social exclusion: in mapping out a particular way of speaking or thinking, it also rules out others[16]:

> "[Discourses] signify who are virtuous and useful and who are dangerous or inadequate, which actions will be rewarded and which penalized. They constitute people as subjects with particular kinds of aspirations, self-concepts, and fears, and they create beliefs about the relative importance of events and objects. They are critical in determining who exercise authority and who accept it." (1988: 13).

From this perspective, the way things are said, their connection to experience, and their public reception are determined by the social context in which they are articulated. With this comes the power to block consideration of some practices, excluding individuals or groups from potential benefit – or what Edelman refers to as a 'nondecision' (citing Bachrach, 1967). He also argues that particular problems are created so that particular explanations can be offered and particular solutions then proposed. The way in which such problems are constructed tends to reflect existing social positions and practices and contributing to unequal distribution of social and economic benefits. Foucault argues that potential inequalities resulting from access to discourses are not necessarily under the direct control of the group that emerges as dominant: instead the means by which power circulates around society also enables resistance.

A Foucauldian approach is only one element of the poststructuralist landscape. Other notable contributions include the work of Derrida who famously claimed:

> "...there is nothing outside the text" (1976:158).

This does not deny the existence of a material world, but indicates that individuals' engagement with the world is dependent on the meaning that discourses provide. Hence a level of scepticism about an objective reality that exists apart from discursive resources.

Some writers use the term 'postmodernism' to describe their approach (Burman & Parker 1993). This includes writers such as Wittgenstein and Lyotard who would dispute Derrida's claims. For instance, Wittgenstein argued that words are nothing until

[16] In Foucault's work, a key consideration in this process is also the possibility of resistance and opposition to dominant discourses that allows for the possibility and reality of social change.

they are enacted. Both refer to the variety of speech within different modes of discourse as *language games* (Heaton & Groves 1999; Lyotard 1979; McGinn 1997) taking on different functions such as authoritative or performative. The means by which language games are played is likened to a game of chess, defined by a set of rules determining the properties of each of the pieces and the accepted way to move them.

Despite the diverse theoretical landscape, it is possible to identify a common set of notions of discourse, described in Box 4.

Box 4: Common poststructuralist notions of discourse

- Realities are discursive: i.e. there is no direct access to a reality outside discourse
- Language is not a transparent or neutral medium providing access to the world
- People become subjects through their participation as speaking subjects within discourses
- Individuals are therefore subjected to the constraints of discourse
- Power, knowledge and truth are interlinked and produced in/through discourse
- Language is never innocent
- Ambiguity, uncertainty, irrationality and indeterminacy lie at the heart of meaning, reason and truth.

Adapted from MacLure (2003)

From a poststructural perspective, rather than being a simple action at any one point in time, a policy can be seen as having multiple meanings constructed, and potentially changing, over time. Policy therefore has a temporal nature, with a policy's own history restricting the freedom of choice for policymaking (Handberger 2003). It can therefore be argued that choices made when a policy is being formed will have continuing and largely determinate influence over the policy far into the future: a policy is expected to follow an incremental pattern and, once on this path, it is difficult to change policy direction.

This reference point appears most relevant to the study of policy and politics, allowing for a focus on argumentation and institutions and helping to deter misconceptions that such research deals only with language construction and ignores any connection with

the institutional realities of policymaking (Fischer 2003). A poststructuralist approach therefore informs much of this research, drawing on the work of writers such as Parker, Foucault and Fairclough.

One criticism has been the lack of a text-analytic dimension, which might explain how meanings, subjectivity and power relations are manifested in the details of 'what people actually say and do' (Poynton & Lee, cited in MacLure, 2003). The abstract approach adopted by Foucault does not link discourse to micro processes and rarely examines texts to see how or whether a discourse is present in concrete language use. A body of work has emerged which attempts to address this and provide a link between text and context, micro and macro, language and discourse. Emanating from the linguistic tradition, critical discourse analysis (CDA) emphasises the social and institutional dimensions of discourse, described so far in this section, and attempts to relate this to the textual fabric of everyday life associated with linguistic analysis. This linking of micro and macro concerns simultaneous study of two levels of analysis, seeking to provide a framework in which knowledge can be accumulated in an integrative and coherent way. In relation to organisational behaviour, it is argued that micro and macro processes cannot be treated separately and then simply added up to understand behaviour in or of organisations, but that this should involve a systematic method allowing for linking of propositions (House, Rousseau, & Thomas-Hunt 1995). This has potential relevance for the study of primary care research policy and is therefore described briefly below.

Critical Discourse Analysis has been heavily influenced by the work of Foucault but proposes a synthesis with micro linguistic approaches. Fairclough has been particularly influential in this area being concerned with language analysis of texts and linking this to wider social structures (1992b; 2000a). He offers a method that combines some of the elements discussed previously and provides four main arguments for considering such an approach: to avoid the misconception that language is transparent and to include language, as a form of social action, within any analysis; to avoid negating texts as a major source of evidence for grounding claims about social structures and processes; to ensure historical factors are truly incorporated; and to ensure a critical analysis that considers texts as a key means by which social control and domination might be exercised (Fairclough 1992b; 2000a; 2001).

Hardy and Phillips (2004) have identified factors that help to explain why some texts have greater instrumentality than others. They point to the fact that documents do not exist in isolation but depend on systematic relationships with other documents: one text draws on other texts and discourses to help develop and sustain meaning. Fairclough (1995) refers to these in conceptual terms as intertextuality: an intertextual analysis being one that draws attention to the dependence of texts upon society:

> "What intertextual analysis draws attention to is the discursive processes of text producers and interpreters, how they draw upon the repertoires and genres and discourses available...generating viable configurations of these resources which are realized in the forms of texts. How texts are produced and interpreted, and therefore how genres and discourses are drawn upon and combined, depends upon the nature of the social context." (1992:213)

The linkage between texts, genres and discourses is clearly evident here. From this perspective, information about the degree to which the texts being studied cross-refer to relevant policies and action, such as the implementation process, might be illuminating (Abbott, Shaw, & Elston 2004). This may inform interpretation of a particular text, by producing more grounded understandings. For example, although not informed by CDA, Abbott and Gillam (2001) found that few Health Improvement Plans referred in detail to the investment plans of primary care groups and trusts, even though the latter organisations were meant to be responsible for implementing the Health Improvement Programme (Abbott & Gillam 2001).

Phillips and Hardy (2002) and Fairclough (1992; 2000) in particular regard the ideal discourse analysis as one that considers text and context. However, the realities of conducting research often means that researchers have to make choices regarding the theoretical underpinnings *and* practical aspects of their work. There is also some overlap between reference points that facilitates use of different approaches according to the nature and type of question under consideration. The approach to discourse analysis is therefore variable:

> "...some studies will focus on the microanalysis of particular texts; others will conduct a broader sweep of the discursive elements of particular contexts; and...some studies combine elements of both." (Phillips and Hardy 2002:20).

4.3 The Significance of Policy Texts

So far, I have described how discourse is grounded in the awareness that language does not simply offer a mirror of the world. Instead:

> "...it profoundly shapes our view in the first place" (Fischer & Forester, 1993:1)

Hence, if it is embedded in the practices of a society, the language of discourse can never be understood as a fixed or closed set of rules, but is based on the interpretations of those who speak and receive it. But how is a discourse communicated? And how is policy transmitted?

The means by which discourses are communicated in modern society is via texts. Use of the term 'text' is not meant to imply that the policy process does not involve, for instance, discussion and debate. But rather that the process itself is textual production of some kind resulting in, for instance, a formal 'policy' document. It may also include transcripts of political speeches, newspaper or journal articles, internet discussions, or interviews with policymakers; all of which constitute texts in the broadest sense of the term (Silverman 2000). When exploring the social and cultural meaning of cockfighting in a Balinese community, Geertz captured this breadth:

> "...cultural forms can be treated as texts, as imaginative works built out of social materials..." (1973:449)

The status accorded to texts varies according to epistemological standpoint. Whereas those adopting a more rational view of the world regard texts as providing a potentially accurate record of some phenomenon; a social constructivist approach is more concerned with the trustworthiness of the text as an accurate representation of reality. In this light, texts cannot be treated as transparent representations of the social world (Fischer & Forester 1993; Prior 1997; Murphy et al. 1998; Phillips & Hardy 2002; Fischer 2003; Hardy 2004).

a) Textual production

According to Atkinson and Coffey (1997) one of the first tasks of the analyst should include the question of how documents are constructed as distinctive kinds of products. They illustrate this via the example of organisational financial audit that provides an

organisational narrative in a highly stylised and summative form: the financial statement (Atkinson & Coffey 1997). The social context in which such documents are framed is such that those unfamiliar with the language characteristics of financial accountancy would find little meaning within these stories, resulting in such texts being impenetrable for those not already placed within the social context they refer to.

Social constructivists treat documents as significant social mechanisms that can be analysed in their own right (rather than as windows on the reality they claim to represent), In this sense, it is difficult to view texts (such as policy documents) as representative of how an organisation or group actually works. However, this should not detract from the importance of such texts in providing contextual meaning to organisational situations:

> "We have to approach [documents] for what they are and what they are used to accomplish. We should examine their place in organizational settings, the cultural values attached to them and what they are used to accomplish." (Atkinson & Coffey 1997:47)

Reinforcing this, Hammersley and Atkinson (1995) suggest that just because documentary accounts cannot be treated as rational or objective, does not mean that they cannot be analysed in terms of what they reveal about the interests and assumptions of the narrator.

b) Impact of texts

It is often unclear why some texts appear to become incorporated into the fabric of a society, community or thinking of an individual, whilst others do not. Hence, there are some characteristics or processes associated with specific texts (and not others), that ensure they are taken up sufficiently widely (Hardy 2004). For instance, policy documents, in particular, may be associated with quite distinctive use of official language associated with government:

> "Accounts of political issues, problems, crises, threats, and leaders...[are]...devices for creating disparate assumptions and beliefs about the social and political world rather than factual statements. The very concept of "fact" becomes irrelevant because every meaningful political object and person is an interpretation that reflects and perpetuates an ideology." (Edelman 1988:10).

In this sense both Fischer (2003) and Edelman (1985; 1988) argue from a poststructuralist perspective that such firmly held narratives have the potential to suspend belief and/or critical judgment and sustain opposition, despite susceptibility to criticism and questioning.

At a basic level, the official nature of a policy text may have some bearing on its resultant 'staying power'. In addition, texts go through phases of 'recontextualization' where they are widely disseminated and come to represent shared symbol systems in which, for instance, rhetorical and semiotic devices become increasingly objective. In this way, meaning becomes more abstracted and actions become taken for granted. Hence, according to Ricoeur, a text does not have meaning in the social world until something 'happens', until an action is taken (e.g. policy document is read) (Ricoeur 1971). As text moves away from its original production, a more durable meaning is potentially created. In this context, documents are studied as legitimating devices and discourse analysts seek to explore their relation to ideology, power and control. Policy discourses therefore shape what is seen as right and wrong in modern society and the preferred solutions of the dominant social group.

4.4 Authorship and Audience

Not everyone can produce and disseminate texts and, in any discourse, certain social positions might be advantaged over others in the ability to produce and transmit texts (Fairclough 1992a; Phillips & Hardy 2002; Prior 1997). Certain characteristics of actors within the context of a particular discourse can therefore accord them agency, for instance access to resources and links to other actors that assist in developing legitimacy and thereby help the process of textual production and transmission (Phillips & Hardy 2002). On the other hand, all sorts of things might unfold entirely independently of the policymaking process.

There is a need to consider interplay between text/s and an individual as texts have the power to legitimate or negate individuals as potential policy voices. Powerful individuals who 'warrant voice' (Potter & Wetherall 1987), instil authority within texts and provide legitimacy to policy. For instance, The Black Report presents a clear association between its author, Sir Douglas Black (the Chief Scientist at the Department

of Health and Social Security at that time, committed proponent of a truly national health service and leading researcher concerned with the equitable delivery of universal healthcare services) and work leading to legitimate changes in policy to address health inequalities. This is despite the fact that it received a rather cold reception from the new Conservative government of the time, which released only 260 duplicated copies of the original typescript, instead of properly printed and published editions by the DHSS or HMSO (Townsend, Whitehead, & Davidson 1992).

There are a number of factors to consider in relation to authorship that may impact on the construction of the document and the transmission of discourse. This might include, for instance, the extent to which the author had a professional stake in the report; the extent of agreement between authors; the proximity of the author to the policy under consideration; the intensity of involvement of the author with the policy; and/or the degree of relevant experience and expertise of the author. In addition, the author or spokesperson may not, in the first instance, refer to an actual person, but to the 'name' by which we know that particular writings and discourses are legitimate texts. For instance, the writers of the average government report will usually disappear when it is published. Even though, for instance, none of us actually believe that something called the Department of Health sat down and wrote a specific report, the Department is still the only authorised author and owner of the text.

Any text is always mediated by the presence of an individual or organisational name and the status and function of that name in society. In addition, the transmission of discourse also requires audience and consideration must therefore be given to whether anyone accesses, reads and internalises policies, and whether this leads to any action on their part. Indeed, it can be argued that the importance of a text comes, not just from authorship or legislative weight, but also relates to the meaning or interpretation of the reader or readers (Edelman 1977; 1988;Yanow 1996).

4.5 Summary

In summary, it is apparent that discursive approaches to studying policy have become increasingly widespread (Greener 2004). There is now a wide range of studies on diverse policy topics and offering a multiplicity of discourse methods. Although

diverse, studies have common features, considering the content of the policy, as well as the language used and other means of textual construction, and the relation to the changing social environment. This combination offers unique insight into the construction of policy and the means by which it is transmitted. Hence, although the broader social context, with its focus on argumentation and institutions, may at first appear to be of most relevance to the study of primary care research policy, this approach alone does not allow for identification of the means by which these socio-cultural discourses are transmitted via linguistic means (i.e. the connection between text and context). A combined perspective is needed, one which links text and context and provides a systematic method for linking societal discourses with actualities of text. I address this in the subsequent methods section.

* 5 *

A NATURAL HISTORY OF METHODS

5.1 Introduction

A formal and conventional account of the methods adopted in this study may begin as follows: the discursive study of primary care research policy in the chapters that follow is based on analysis of policy documents across a thirty-four year period and interviews with key policy stakeholders. At some level this represents an accurate representation of what was involved but it fails to answer important questions central to undertaking this type of work. For example, how can a researcher come to understand the underlying power relations of discursive activity and identify those without a policy voice? What is the process that allows for identification of prevailing, underlying and hidden policy discourses? How does a researcher recognise rhetoric or metaphor as such when it is used in a policy document? How is the temporal element of discourse identified beyond the specified period of data collection?

I addressed these questions through a process of 'sense-making' that I describe below. I reflect on the different frameworks that might assist in the process of making sense of primary care research policy, describe the framework selected, its relevance to my work and the way in which I applied it to my research. I then go on to describe the process of data collection, analysis and writing and relate this to the different aspects of the framework that illuminated my work. I present this as a natural history of methods in order to provide a comprehensive and iterative account and to address past criticisms of discourse analysis vis-à-vis a lack of detailed description of methods and tendency to rely on judgement. I have included an overview of this natural history within Figure 2 over the page to provide readers with an indication of where this natural history will lead them.

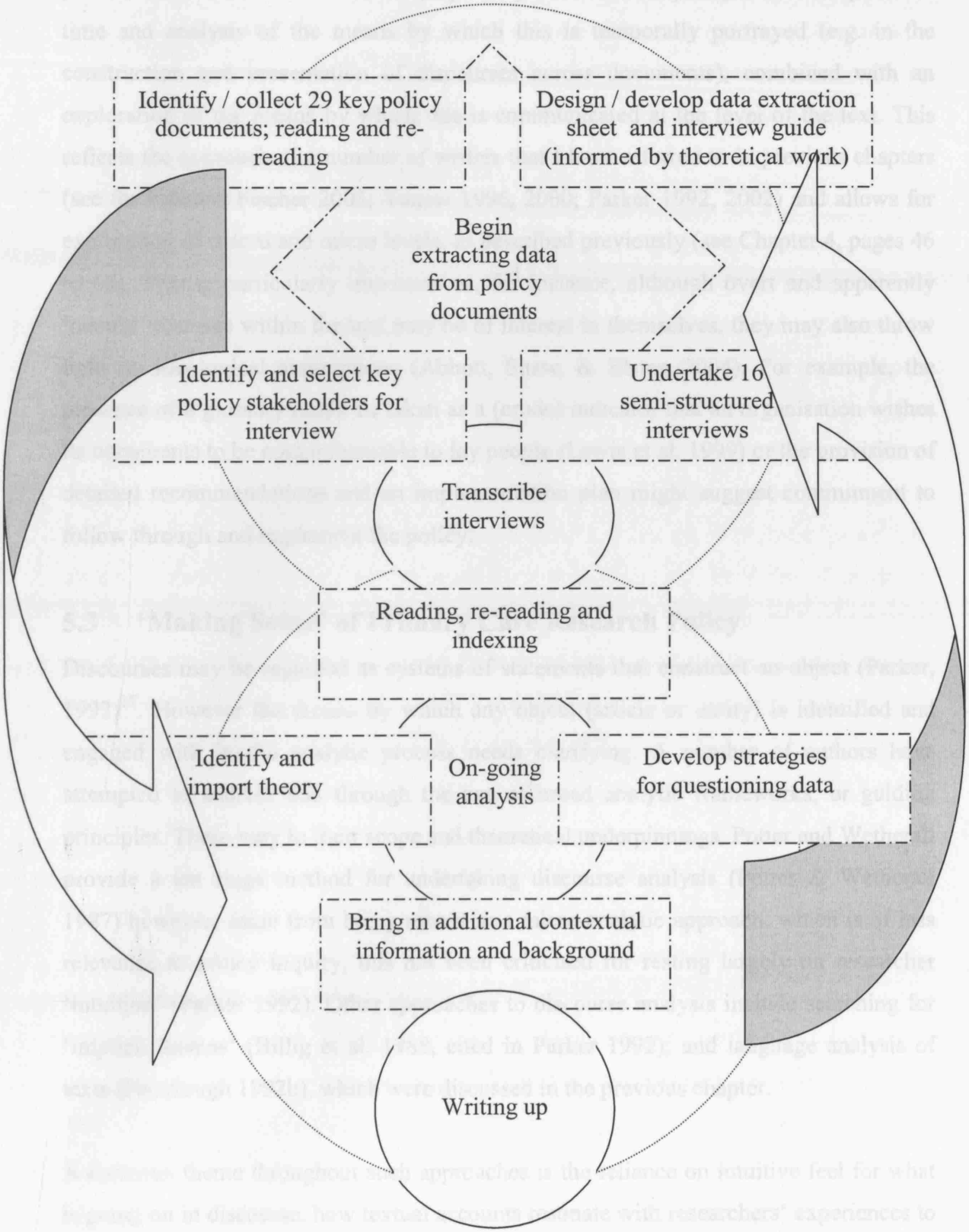
5.2 'Sense-making' as an Approach to Discourse Analysis

In undertaking discourse analysis, the very nature of the work in which the researcher is immersed means that it is difficult to be prescriptive or to develop specific analytic techniques. Following Yanow (1996), uncovering the meaning behind discursive activity is far more involved than any individual tool suggests. Her three-part categorisation of human action (presented in her study of community centres in Israel, (Yanow D 1996)) emerged out of the types of data that were observed rather than from a predetermined set of analytic methods. She describes this process as follows:

> "Out of these data, as I sat in my study afterwards struggling to construct a written description of the intricacies of policy implementation as it looked in the field, emerged the understanding of language, acts, and objects as artefacts expressing values, beliefs and feelings, through whose use those values, beliefs, and feelings are communicated." (Yanow: 44).

As my research encompasses a broad understanding of what primary care research and related policy means, it is difficult to resort to typical circumstances or one simple analytic technique. Rather than relying on the traditional categorisation of data collection and data analysis, I adopt a discursive approach concerned with on-going interpretation of both text (in this case policy documents, transcripts of in-depth, face-to-face interviews and supplementary contextual information) and context to allow me to 'make sense' of policy-related issues. The process of sense-making is on-going in the consideration, identification and observation of texts: data collection and analysis are therefore interwoven and iterative (although, for the purposes of clarity and academic convention the two are necessarily treated as somewhat separate in describing my methods below).

Figure 2: An overview of the natural history of methods



This iterative approach is suited to my work because it allows for illumination of the political and social context/s in which primary care research policy has developed over time and analysis of the means by which this is temporally portrayed (e.g. in the construction and presentation of discourses across documents), combined with an exploration of the means by which this is communicated at the level of the text. This reflects the approach of a number of writers that I have referred to in previous chapters (see for instance Fischer 2003; Yanow 1996, 2000; Parker 1992, 2002) and allows for exploration of macro and micro levels, as described previously (see Chapter 4, pages 46 to 65). This is particularly important as, for instance, although overt and apparently 'neutral' features within the text may be of interest in themselves, they may also throw light on ideological assumptions (Abbott, Shaw, & Elston 2004). For example, the presence of a glossary might be taken as a (crude) indicator that an organisation wishes its documents to be comprehensible to lay people (Lewis et al. 1999) or the provision of detailed recommendations and an implementation plan might suggest commitment to follow through and implement the policy.

5.3 'Making Sense' of Primary Care Research Policy

Discourses may be regarded as systems of statements that construct an object (Parker, 1992)[17]. However the means by which any object (article or entity) is identified and engaged with in the analytic process needs clarifying. A number of authors have attempted to address this through the use of broad analytic frameworks, or guiding principles. These vary in their scope and theoretical underpinnings. Potter and Wetherall provide a ten stage method for undertaking discourse analysis (Potter & Wetherall 1987) however, aside from being rooted in a micro-analytic approach, which is of less relevance to policy inquiry, this has been criticised for resting largely on researcher 'intuition' (Parker 1992). Other approaches to discourse analysis include searching for 'implicit themes' (Billig et al. 1988, cited in Parker 1992); and language analysis of texts (Fairclough 1992b), which were discussed in the previous chapter.

A common theme throughout such approaches is the reliance on intuitive feel for what is going on in discourse, how textual accounts resonate with researchers' experiences to produce plausible findings and of the researcher's reflexive awareness. To avoid

[17] This follows Foucault's definition of discourses referred to earlier, as "practices which form the objects of which they speak" (see page 43).

criticism for lack of method or under analysis that often follow from this, Parker (1992; 2002) presents researchers with a conceptual checklist. This checklist or framework is not a method as such but consists of ten criteria (three of which he describes as supplementary and optional). I adopt this framework as a means of identifying discourses within my research: I describe the rationale for this below along with the different stages of the framework.

a) Ten criteria for distinguishing discourses

Parker writes from within the discipline of psychology, drawing particularly on poststructuralist theory. Although his work has not developed out of a concern for policy inquiry as such, his framework provides a theoretically relevant starting point, encompassing a particular reading of a number of conceptual and methodological building blocks associated with the work of Foucault. Many of these building blocks are highly relevant to the discursive study of policy (drawing on, for instance, concepts of power relations). Importantly three of his 10 criteria focus on institutions, power and ideology: Parker presents these as auxiliary criteria however, they are of particular relevance here in relation to the maintenance of power relations and institutional structures associated with government policy and with primary care research and are therefore included within the analytic process. All ten of Parker's criteria are presented in Box 5 over the page (from hereon in referred to as Parker's framework). In line with his proposals, the twenty stages listed were not undertaken sequentially but are presented as such to aid readability.

The discourse analytic approach I have adopted is based on Parker's framework and aims to provide a coherent and relevant analysis of primary care research policy. The approach considers the context of primary care research in relation to the changing social environment and builds on much of the theoretical description provided in previous chapters (see, for instance, the description of poststructuralist approaches to discourse on pages 54 to 62). I provide a description of each of the elements of Parker's framework below[18].

[18] For further detail see Parker (1992; 2002), from which my description of the framework is drawn.

Box 5: Criteria for distinguishing discourses

	Criteria	Stages
Seven key criteria	**A discourse is historically located**	1) Looking at how and where discourses emerged 2) Describing how they have changed, and told a story
	A discourse is a coherent system of meanings	3) Mapping a picture of the world this discourse represents 4) Working out how a text using this discourse would deal with objections to this terminology
	Discourse is realised in texts	5) Treating objects of study as texts which are described, put into words 6) Exploring connotations through some sort of free association (best done with other people)
	A discourse is about objects	7) Asking what objects are referred to, and describing them 8) Talking about the talk as if it were an object, a discourse
	A discourse contains subjects	9) Specifying what types of person are talked about in this discourse, some of which may already have been identified as objects 10) Speculating about what they can say in the discourse
	A discourse refers to other discourses	11) Setting contrasting ways of speaking, discourses, against each other and looking at the different objects they constitute 12) Identifying points where they overlap, where they constitute what look like the same 'objects' in different ways
	A discourse reflects on its own way of speaking	13) Referring to other texts to elaborate the discourse as it occurs, perhaps implicitly, and addresses different audiences 14) Reflecting on the term used to describe the discourse, involving moral/political choices by the analyst
Three auxiliary criteria	**Discourses support institutions**	15) Identifying institutions which are reinforced when this or that discourse is used 16) Identifying institutions that are attacked or subverted when this or that discourse appears
	Discourses reproduce power relations	17) Looking at which categories of person gain and lose from the employment of the discourse 18) Looking at who would want to promote and who would want to dissolve the discourse
	Discourses have ideological effects	19) Showing how a discourse connects with other discourses that sanction control 20) Showing how the discourses allow dominant groups to tell their narratives about the past in order to justify the present, and prevent those who use subjugated discourses from making history

i) A discourse is historically located

Discourses are embedded in history and need to be considered in relation to the dimension of time. This is because the objects they refer to (such as a research protocol) are constituted in the past by the discourse or related discourses. Therefore, discourse analysis cannot take place without a) locating its object in time in a particular way; and b) seeking to identify where and how discourses emerged in order to make sense of current situations or events (and references to them). An understanding of the historical location of discourses requires an appreciation of what discourses have emerged, how they arose and how they have changed (stages 1 and 2 in Parker's framework). This is facilitated by the study of texts within which discourses became dominant, which in turn facilitates an understanding of when and how discourses combine together (for instance, science and technology). For instance, exploring the discourse of modern feminism might involve uncovering texts associated with the 19th century reform movement and the granting of the vote to women in the twentieth century.

ii) A discourse is a coherent system of meanings

In undertaking discourse analysis, we apply existing knowledge of discourses from outside the research onto any fragment of discourse in order for it to become a coherent part of analysis. This clearly has its roots in the work of Foucault, acknowledging that discourses are systems of statements that form the objects about which they speak (Foucault 1972; Parker 1992) (see page 43). It draws on the idea that there are groups of statements within any discourse that refer to the same topic, have a certain coherence and can therefore represent a particular reality of the world. This is not to suggest that systems of statements remain fixed or are without internal contradictions (see vii). Uncovering this system of meanings necessitates mapping the world the discourse represents and working out how a text using the discourse might deal with objections to the terms used (stages 3 and 4).

iii) Discourse is realised in texts

It would be misleading to suggest that discourse analysis allows us to find entire discourses: we only ever find fragments of discourse. These fragments are found in texts, in the very broadest sense of the term. This includes, for instance, interviews and discussions (that might also become transcripts), policy documents and journal articles,

but also pictures, tickets, graphical representations or television advertisements. Parker refers to such texts as 'delimited tissues of meaning', where the world understood by us (and so given meaning by us) is textual. This criteria is realised in analysis by treating objects of study as texts and exploring connotations within and across these (stages 5 and 6 in Parker's framework).

iv) A discourse is about objects

A discourse analysis is about discourses as objects. In other words, having adopted a social constructionist position, it is clear that a) language brings phenomena into being; and b) the simple use of a noun not only refers to an object but also gives that object a reality. The representation of any object then occurs in uses of the particular discourse – the object becomes defined through the discourse/s at play. This follows from the work of Foucault who, for instance, points to the production of the clinic (the object) through contemporary medical discourse (Foucault 2005). Similarly, the modern feminist discourse referred to above might be said to contribute to the construction of 'the home' in contemporary society. Distinguishing discourses involves asking what objects are referred to, describing them and then talking about the talk as if it were an object or discourse (stages 6 and 7).

v) A discourse contains subjects

A discourse addresses us in particular ways, allowing for the creation of social identities and performances. Parker uses the example of a discourse shouting at us 'hey, you there' in order to make us pay attention. In this way, discourses invite us to perceive others, our relationships and ourselves in particular ways; they position (or subject) us in particular roles and identities. The role of analysis is to identify the role we have to adopt to hear the message behind a discourse, what is expected of us if and when we are addressed; and what rights we have to speak in relation to that discourse (stages 9 and 10). A simple example relates to the doctor-patient relationship that typically employs a medical discourse, positioning each person in different roles associated with, for instance, caring and compliance. Likewise a feminist discourse might position women in roles and identities that are more or less gendered.

vi) A discourse refers to other discourses

Describing or articulating reflections on discourses necessarily involves the use of other discourses. For example, the discourse of feminism is often referred to in relation to the dominance of patriarchy. This is explicitly related to the subsequent point (see vii) in that as discourses presuppose other discourses, they do so to an extent that any contradictions within one discourse open up questions about what other discourses are at work. This results in a web of inter-related discourses that support or dispute one another and - given that a discourse not only delimits what can be said, but also allows for new statements to be made – allows for shifts and changes over time. This reflects Fairclough's term, 'intertextuality' that describes networks of social practices (where discourses, styles and practices are networked together). The analytic process involves setting contrasting discourses against each other and looking at the different objects they constitute, as well as looking at the way objects are constituted in different ways when discourses overlap (stages 11 and 12).

vii) A discourse reflects on its own way of speaking

A precondition relating to each discourse as a whole is that it comments upon the terms it employs. For instance, a feminist discourse might reflect on terms such as gender, inequality or sexuality. Although this may not occur within each separate policy document or by each speaker, it is a precondition relating to the discourse *as a whole*. It is possible to find instances where the terms used are commented upon: the analytic steps involved include reflecting on the terminology used; treating the discourse itself as an object and reflecting on the term/s used by the analyst to describe the discourse (stages 13 and 14). The later involves moral and political choices on the part of the analyst that, I argue, should be made explicit. I address this in Chapter 6 by reflecting on my own political and policy choices and consider how such choices might have influenced the analytic process.

viii) Discourses support institutions

The influence of a more critical approach to discourse can be seen in three supplementary criteria of the framework referring to exploration of the institutions supported by discourses, the (re)production of power relations and the ideological effect(s) of discourses. In relation to the first of these, discursive practices involve the reproduction of institutions. For instance, an academic discourse exists within research

journals, reports and books, university buildings, lectures and seminars and discussions with students. Employment or use of such discourse also (re)produces the material basis of the institution of academia. Analysis involves not only identifying those institutions supported by the discourses at play, but also those subverted or excluded (stages 15 and 16). For instance, the extension of feminist discourse might subvert patriarchal institutions such as certain hierarchical churches or religious bodies.

ix) Discourses reproduce power relations

According to Parker, discourse and power should be talked about in the same breath. Drawing on the work of Foucault, he points to the intimate relationship between power and knowledge to suggest that analysis must consider, for instance, the way in which institutions reproduce power relations. The role of the analyst therefore involves identifying who might gain or lose from the employment of a discourse or discourses (stages 17 and 18). For example, employment of feminist discourse/s might challenge patriarchal relations and institutions and facilitate a shift in power relations and a reconceptualisation of gendered roles and identities. However, caution is needed to recognise that those challenging power might themselves be tied up with oppressive discourses.

x) Discourses have ideological effects

Although Foucault distanced himself from ideology (insisting that the term always stands in opposition to something that is perceived as 'truth'[19]) I adopt Parker's position, arguing that although discourse analysis need not be concerned with ideology, it would be wrong to simply avoid it (Parker, 2002). I take ideology to be a description of relationships and effects: a suggestion of how things *should* proceed, informed by one perspective on the world and with progressive political effects (Burr 2003) and, in line with Parker's approach, acknowledge that multiple versions of 'the ideology' might coexist and compete within a discourse. In relation to analysis this involves showing how discourses connect together to sanction control and how discourses call attention to the narratives of some groups and subjugate others in order to justify and support discursive practices (stages 19 and 20). For instance, there is no single, universal form

[19] Following this line of reasoning the process of distinguishing discourse should not be concerned with drawing a line between what comes under a category of truth within a discourse and that which comes under some other category; but should focus on how different truths are produced by discourses that are themselves neither true or false (Foucault, 1986).

of feminism that represents all feminists but certain views dominate within the movement as to how feminism *should* proceed.

5.4 Applying the framework

I began to make sense of policy by asking a number of questions about the history and context of developments around primary care research policy early on within the research process. Questions included how problems and policies evolved during different periods of time; what policies were developed and implemented; and who defined problems and policies during different periods of time. As well as feeding into the first findings chapter on the emergence of primary care research and its relation to government and science policy (see Chapter 7), this also informed the overview of primary care research policy presented in Appendix 2.

This early work allowed me to begin to identify key documents and policy stakeholders and consolidate thoughts around data collection. It led me to identify two areas of data collection: 1) government produced documents relating to policy effecting primary care research; and 2) narratives drawn from in-depth face-to-face interviews with key policy stakeholders. Prior to describing these and the analytic process, it should be noted that the selection of data from different sources was not a mutually exclusive process but, for instance, reading and re-reading policy documents allowed for identification of key people involved in production, writing and dissemination of policy. Similarly, interviews with policy stakeholders allowed for discussion of relevant documents, as well as other stakeholders. Both of these stages also led me to supplementary contemporary and historical texts.

In the following sections I describe the identification and collection of policy documents and the rationale for my approach to extracting data from them. I then explain why I undertook interviews with policy stakeholders, how these stakeholders were identified and how interviews proceeded. I then consider analytic work in relation to these interrelated sets of data and describe how additional supplementary material was used to explicate and illuminate further; before going on to describe the process of writing up my findings. Throughout these sections I draw attention to the different

stages of Parker's framework to demonstrate how each 'stage' of the research related to the framework for identifying discourses.

In line with good research practice and regulations, the research described below received ethical approval from the appropriate NHS Research Ethics Committee in 2003 (MREC 03/5/067).

a) Documentary work

As discourses are realised in texts (stage 5 and 6, see page 74), my initial phases of data collection focused on those texts directly related to policy discourses. Policy documents were selected as an invaluable source of data producing a distinct version of reality (i.e. the use of documentary form and language was regarded as a means of constructing, as opposed to simply reporting, a reality).

There are a number of reasons why I considered documents important to the analysis of policy. Firstly, there were a considerable number of policy documents available that offered material for study even in relation to very new policy issues or decisions (Abbott, Shaw, & Elston 2004). In addition, government departments responsible for policymaking are required to publish a wide range of plans and these were not only readily available, but also inexpensive to collect (Appleton & Cowley 1997). All documents studied were in the public domain hence there were no issues of privacy, anonymity and confidentiality to be negotiated (Hodder 1994) and they represented a non-intrusive method of data collection meaning that I did not have to trouble busy professionals in the early stages of my research (Abbott, Shaw, & Elston 2004). Lastly, as documents were already prepared (prior to the research and for other purposes) their production remained uninfluenced by the data collection process (Bryman 1989) (though this did not mark them as somehow more neutral or objective than other sources of research data).

The appropriateness and value of methods for analysing documents is seldom debated, and the methods used often remain unexplained and unjustified (Abbott, Shaw, & Elston 2004). I address this by detailing the sampling of policy documents; the

development and use of a data extraction tool[20]; and the use of artificial boundaries to assist in finding a 'way in' to the data in the sections below. I describe the means of bringing this and other sources of data together in subsequent sections on 'Analytic work' and 'Writing to make sense' (see pages 92 to 102).

Selecting and sampling policy documents: initial phases

Policy – and in this case, primary care research policy – is an analytic category, the contents of which were guided by the research question and identified by myself, the analyst (Heclo 1972). The approach to sampling relevant documents was somewhat problematic as there is no fixed set of primary care research policy documents waiting to be discovered (for instance, the Peckham and Culyer reports (DH, 1991; 1994) both focused broadly on NHS research, but had an enormous impact on primary care research). The question remained as to the means of developing an effective strategy to bring together relevant documents, including how to know when to stop gathering documents.

I placed importance on policy discourses and not on specific documents. Hence, rather than focusing on documents produced by an individual or organisation, I first considered what is understood by policy itself. Following Heclo (1972), I adopted the view that policy includes a sense of purpose[21] and sought to engage with policy discourse via the transmission of an idea or intention. I was therefore concerned not only with those documents carrying legislative weight or drawing on the official nature of public policy, but also a wider range of documents (and interview texts) that enacted the transmission of ideas relating to primary care research policy and the potential means for implementing these ideas. In addition I wanted to consider the structural context in which documents were produced.

Contextual work already undertaken had assisted in identifying several documents that I began by reading and re-reading. These texts (and those subsequently selected) were chosen because they represented the articulation of government policy in a controlled, deliberate format and one where it was legitimate to assume that the policy content, as

[20] Whilst acknowledging the inherently problematic nature of data extraction in discourse analysis, this facilitated immersion within the data and thereby the process of distinguishing discourses.
[21] See earlier discussion on Considering Policy, pages 23 to 39.

well as the way it was expressed was significant (Greener 2004). They were selected from a period of 6 years to facilitate exploration of policy discourses across documents and across time (stage 1 and 2). The *Mant Report*[22] (Mant, 1997) was identified in my early work as an important juncture of policy discourse relating specifically to primary care research and I therefore included this as an important precursor to changes in the way that research policy proceeded. I then selected 5 further documents from around the same period and of different types that allowed me to consider policy discourses wider than primary care research alone. This included the White Paper *New NHS: Modern Dependable* (Secretary of State for Health, 1997); the third reading of the National Health Service Reform and Health Care Professions Bill in the House of Lords (Lords Hansard, 2002); a report from a Joint Ministerial Review of the role of Primary Care Trusts in relation to learning and research in the new NHS (2003) that emerged out of the House of Lords debate; and two Department of Health reports: *Shifting the Balance of Power* (2001) and *Teaching Primary Care Trusts* (2001). These documents were not regarded as privileged in some way, but as an initial, small set of data that allowed me to develop and refine the analytic process and begin to explore policy discourses relevant to primary care research. Although these were not considered as necessarily part of the final dataset at this stage, all were, as it turned out, included in subsequent analysis.

To assist the process of documentary analysis, I developed an extraction form for guiding me to data relevant to the interpretative analysis of policy over time (see next section) and used this to systematically record my early thoughts and ideas. This process also led me to a wider web of documents that were referenced and cross-referenced and allowed me to build a sample for more systematic work that I come on to describe below. In addition, in the later stages of the research, a number of policy documents were referred to by interviewees. Rather than leading me to new documents, this tended to provide additional justification for the choices made.

Developing a template for data extraction

One approach to a socially relevant analysis of documents asks basic questions about the policy discourse underpinning documents such as why were they prepared, by

[22] This is the commonly used name referring to the final report of the National Working Group on R&D in Primary Care, chaired by Professor David Mant.

whom, for whom and following what rules and conventions? Although important, such an approach ignores deeper questions, such as what is the political or ideological purpose underpinning policy (Harrison 2001)? Or what is the discourse that permeates the policy area (Jupp & Norris 1993)? To address such questions in a systematic way, I developed a data extraction tool for use in analysing documents. This focused largely, but not exclusively, on the content and context of documents and links between them, thereby facilitating analysis of policy discourses as opposed to individual documents themselves.

Guided by theoretical approaches to constructivist policy inquiry (see pages 31 to 45), I began by identifying four broad (and not necessarily sequential) areas of the policy process that were relevant to my research aims and objectives as follows:

1) Context - how and why a document came to be written and the structural context in which this emerged;
2) Method - how the policy document was developed and how it related to, or built on, wider policy initiatives;
3) Content - what the document said and did not say and how this related to wider texts; and
4) Implementation - what was intended as a result of the document or policy initiative.

For each of these areas I then developed a series of questions or categories to extract and record relevant data and including a section dedicated to exploring the use of rhetorical devices as a ‚means of communicating discourse, thereby facilitating micro-level analysis. I supplemented this with sections indicating relevance and importance of documents to my research question; a section for notes to record thoughts and queries relevant to the analytic process; and a separate spreadsheet in which I recorded references across documents and to policy actors identified as being involved in the production of each document (e.g. steering group member). Development was guided by the theoretical approaches to constructivist policy inquiry (particularly that outlined in Chapter 3 describing policy as discourse) and by Parker's framework for distinguishing discourses (see page 73). A copy of the data extraction form is included in Appendix 4, detailing the rationale for each section included. Throughout the process of extraction, I included references to document chapters, sections and/or page numbers in order to facilitate my returning to the original data. Once data had been extracted I

recorded this within a spreadsheet in order to more easily gain an overview of the documents studied[23].

Constructing and working with artificial boundaries

Having begun to identify and work with documentary data, I soon realised that I needed a more structured means of working across different discourses and periods of time. This was partly due to the large number of policy documents that were coming to light and their potential relevance to my research. I therefore constructed artificial (but flexible and permeable) boundaries to allow me to find a 'way in' to the extensive number of documents I identified and the wide-ranging policy discourses at play. These artificial boundaries were not designed as analytical categories but merely as a tool to allow analysis to proceed effectively[24].

I was concerned to explore whether some documents were perceived as more important than others (Platt 1981). Therefore, instead of ignoring the fact that some documents appeared to be highly valued (e.g. because they were preserved, copied and written about or repeatedly referred to by interviewees), I actively noted this and included it within my analysis in an attempt to more fully appreciate historical or ideological significance of particular policy acts. This informed my selection of artificial boundaries.

I had already identified the *Mant Report* as a potentially important document. It became clear that there were other documents that were cited and recited, identified as important precursors to development or change. I sought to make use of these documents by identifying each of them as important to the development of research policy and around which I was able to identify a wider web of documents and discourses. This resulted in the construction of *three* artificial boundaries loosely based around three documents described in Box 6 and in each of which it was possible to think about the discourses at play. This was not an instantaneous process or selection decision but arose out of many months of gathering documents, organising and reorganising these, considering and

[23] This did not include the data extracted on storylines and rhetorical devices that were too extensive to record in this way.

[24] I used this term 'artificial boundaries' as a reminder of the arbitrary nature of each boundary constructed and of the need to avoid placing importance on these boundaried moments above any over. The term also suggested the limited temporal consideration captured by each boundary and, following from this, reminded me of the need to bring these together when making sense of primary care research.

extracting information, discussion with supervisors and colleagues and early consideration of policy discourses. In the early stages of my research I found it difficult to wholly conceptualise developments around primary care research and the eventual decision to create and work with artificial boundaries essentially provided a means for me to move to the next stage of my work: to facilitate questioning, analysis, conceptualisation and further theoretical work.

Box 6: Description of documents guiding the construction of artificial boundaries

1) Published in 1991 the **NHS R&D Strategy** emerged from earlier debate regarding the development of health-related research managed by the Department of Health. The strategy embodied a formal acknowledgement of health-related research being on the government policy agenda and provided opportunities for development and links with wider healthcare planning. It followed from the appointment of a new Director of Research and Development (Michael Peckham, who co-ordinated the strategy) and the development of a Central Research Committee within the Department of Health. The strategy is also referred to as the *Peckham Report.*

2) The **National Working Group on Primary Care Research and Development** was setup by the Department of Health and formally reported in 1997 in what became known as the *Mant Report.* It came at a time when primary care was gaining increasing attention within healthcare policy that recognised the need for research to develop and support an evidence-base upon which to practise high quality clinical care. The report facilitated greater government support for primary care research.

3) The **Final Report of the Working Party on Research for Patient Benefit** came at a time of immense change for health-related research policy, with an increasing focus on the global economy and the role of research in developing the UK's position as a world leader. The working group was set up by the government and reported directly to the Secretary of State for Health who drew directly on interim findings to shape Budget proposals in March 2004. The final report was published several months later. It is referred to throughout simply as *Research for Patient Benefit.*

I undertook several readings and re-readings of these three documents, using the data extraction form, as well as making more detailed notes. This provided a detailed picture of the landscape at one point in time from which a broader and more detailed picture

could then emerge. I regarded artificial boundaries as surrounded and supported by a web of inter-related material; hence, guided by my research questions, I then identified a web of documents that influenced the development of policy discourses over time. I was guided by the information emerging from documents themselves and resisted the temptation to include only those documents that I considered important. I ensured different types of document were sampled and several instances of each were included across different periods. This resulted in a total of twenty-nine documents, spread over the period 1971 to 2005[25], detailed in Appendix 5.

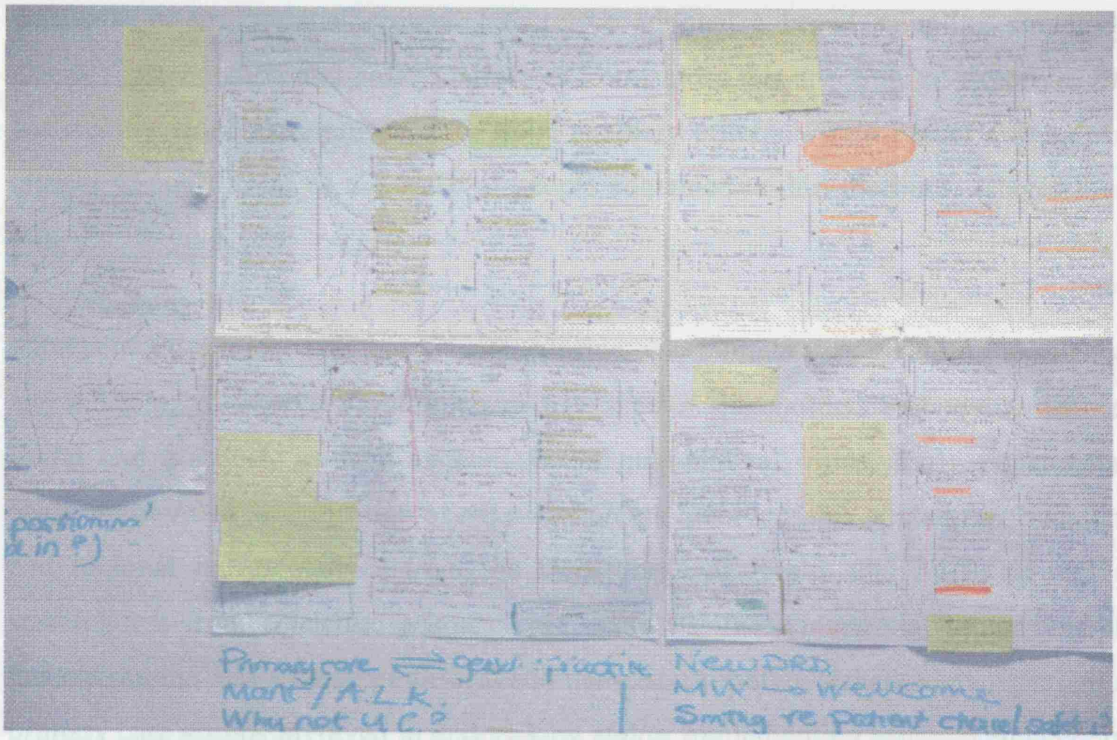
This was not a static list of documents identified and fixed in the early stages of my research: in reality the process of identifying documents and extracting data was one that unfolded throughout my research and was influenced by interviews and analytic work described in the sections below. I continued to review and add to my sample of documents as I continued to make sense of policy discourses.

To further assist in my finding a 'way in' to the data, I constructed large hand drawn, coloured charts detailing each of the documents identified, the main policy stakeholders involved in their production, and the potential discursive links across documents. For practical reasons, it is impossible to include these in their entirety here but Plate 1 presents an overview of the charts that provided a useful starting point for spatially exploring intertextual relationships.

This initial identification of, and extraction from, documents raised a number of questions about the historical location of discourses, the construction of perceived policy problems and the rationale for policy solutions to these, as well as the means of communicating policy-related issues. This led me to the second phase of my research: undertaking interviews with policy stakeholders.

[25] 1971 was the date of the earliest document identified. I selected the end of 2005 as a reasonable cut off point at the end of my research process.

Plate 1: Wall charts developed in the early stages of the analytic process



b) Interview work

Policy documents represented aspirations to a possible future reality rather than one that actually exists, and it was therefore difficult to explore the reality of such aspirations by documentary analysis alone (Abbott, Shaw, & Elston 2004). Hence in looking to future plans for primary care research policy, it was not only documents that were given consideration, but texts in a wider sense (stage 5 of Parker's framework, page 73). This aided in understanding the policy process through exploration of text and practice, purpose and consequence/s. Other sources of research data therefore had an important role. Hence I included first person accounts of the policy process and its impact on primary care research to allow for some exploration of audience reaction and implementation issues. These first person accounts were drawn from face-to-face in-depth interviews with policy stakeholders.

Identifying and sampling policy stakeholders for interview

Just as there is no unambiguous set of documents constituting primary care research policy waiting to be discovered, there is also no clear, single group or set of individuals who are clearly identifiable as 'policy stakeholders'. Although the research policy process, in the broadest sense of the term, has been largely maintained by central

government[26], it has drawn in expertise from institutions beyond government, such as academia or professional groups. I therefore adopted a broad sampling strategy to ensure representation and policy narratives from across this spectrum of expertise. This particularly aided exploration of the three auxiliary criteria within Parker's framework (stages 15 to 20) and of the types of people contained within discourse (stages 9 and 10).

Alongside discussion with supervisors, considerable thought was given to the selection and inclusion of interviewees to ensure a balance of stakeholders embodying different social and political, as well as clinical and non-clinical, roles. Early documentary analysis provided an indication of the stakeholders involved: this guided me to national and regional representatives from the Department of Health and NHS; as well as stakeholders from academic primary care context/s, the commercial sector, and the general public; and a range of clinical and non-clinical policy stakeholders representing primary care groups involved in undertaking and/or implementing research and delivery of primary healthcare (including general practice, nursing and non-clinical groups). I also sought to identify at least one potential interviewee with little or no experience of the policy process but with an appreciation of the social and political dimensions of primary care research (with a view to elucidating stages 4, 9 and 10 of Parker's framework, page 73). Given the temporal nature of discourses, I also wanted to capture policy narratives over a period of time, enabling illumination of the development and implementation of contemporary and historical policy initiatives (stages 1 and 2). I therefore sought potential interviewees able to recall and discuss their experiences of research policy (and the structural context in which it was produced) from the middle of the 20th century to the current day.

The process of identifying potential interviewees involved drawing up a list of key stakeholders and then drawing a purposive sample from this that captured the range of perspectives described above. Potential interviewees were identified via several sources: policy documents relating to primary care research, other supplementary documents that provided background to the area (e.g. editorials, implementation guides, staffing lists of

[26] There is dedicated space for developing research policy via the system of central government, which following the instigation of a Research and Development Directorate at the Department of Health, proceeds under the direction of the Director of Research and Development.

current and past bodies); and discussion with interviewees (all interviews included a discussion about key policy stakeholders in this area, which allowed for identification of interviewees or affirmation of previous selections).

A total of thirty-one stakeholders were identified throughout the research, often with an overlap of roles (and included within the sampling frame to ensure that, if one person declined to participate another within the sampling frame could be invited in their place). I began by inviting 15 policy stakeholders to participate. Of these, 12 agreed, two declined[27] and one was not available (due to illness). I subsequently invited an additional four people to fill these gaps and address additional gaps that I had subsequently identified. All four agreed to participate.

This provided a total of 16 first-person accounts. To communicate the breadth of stakeholder accounts and range of policy expertise, I have included a brief description of their role and indicated the reason for their selection within Table 2. The worlds of primary care, research and policy are not large and detailed accounts of individual roles and responsibilities might unwittingly disclose identities. Hence, descriptions are necessarily sketchy in order to protect both confidentiality and anonymity, as agreed through the process of informed consent with each participant. This is evident, for instance, in the description of many interviewees as senior academic general practitioners. This is meant to conceal some of the wider activities of those selected and thereby protect identities. In reality, academic general practitioners included were selected to represent a number of different organisations, roles or contributions to policy as opposed to academic general practice *per se* (as demonstrated within individual descriptors in Table 2, this included representation from the Society of Academic Primary Care, influence on strategic capacity building for primary care research, involvement in the early development of general practice research, and involvement in NHS research strategy and policy). To enhance readability and aid interpretation, the descriptors provided in Table 2 are also used within findings chapters to attribute any direct quotations used.

[27] The two stakeholders who declined were both based within the Department of Health, one having retired and the other suggesting a senior representative with primary care in their portfolio.

Table 2: Overview of interviewees roles and experiences

		ORGANISATIONAL / PROFESSIONAL ROLE						INVOLVE-MENT			EXPERIENCE RELATING TO RESEARCH POLICY						
ID	DESCRIPTOR*	Senior academic	Non-clinical	General practitioner	Nurse	Senior DH / NHS**	Industry	Local / regional	National	International	Capacity building	Public involvement	Research governance	Primary care focus	NHS organisation/s	None	Historical narrative***
20	Senior representative, UK pharmaceutical industry						•	•	•				•				
2	Senior DH policymaker, research capacity building					•		•	•		•		•	•	•		
5	Senior DH policymaker, research policy development					•			•	•			•				
8	Representative from INVOLVE					•			•			•					
17	Senior DH policymaker, strategist					•		•	•		•		•	•			
19	General practitioner, no research policy experience			•												•	•
14	Senior academic nurse	•			•				•		•				•		
18	Senior non-clinical academic based within primary care	•	•					•	•		•			•			
9	Senior academic, senior DH policymaker and strategist	•				•		•	•	•					•		•
1	Senior academic general practitioner, capacity building	•		•				•	•		•			•			
10	Senior academic general practitioner, SAPC representative	•		•				•	•		•			•	•		•
16	Senior academic general practitioner, retired	•		•				•	•	•				•			•
11	Senior academic general practitioner, high profile policy input	•		•				•	•		•			•	•		•
6	Senior academic general practitioner, NHS organisation	•		•		•		•	•					•	•		•
7	Senior academic general practitioner, regional primary care	•		•		•		•	•		•			•	•		•
12	Senior academic general practitioner, regional primary care, strategist	•		•		•		•	•		•		•	•	•		

* Also used to allocate direct quotations within findings chapters.

** Including arms length bodies.

*** Indicating whether interviewees were able to recall and discuss research policy development prior to the first NHS R&D Strategy in 1991.

All interviewees were contacted via a standard letter and accompanying information sheet explaining the research aims and objectives, their potential role within the study and the confidential nature of the interview and data generated. Where no response was received after ten working days, I contacted potential interviewees once again with a reminder email and/or phone call that then elicited a response.

Interviews as policy narratives

There was no fixed and limited set of questions that was relevant to each and every interviewee. Instead I sought to ask a number of broad questions to facilitate discussion around individuals' own roles, experiences and knowledge over time and the structural context/s in which this was situated. To do this I adopted a narrative approach to interviewing (Muller 1992), allowing for an account from the narrator's perspective of how events and actions unfolded over time (Greenhalgh, Robb, & Scambler 2006; Greenhalgh, Russell, & Swinglehurst 2006). Although at some level narrative interviews represent the personal stories of individuals, they also take place within abroad structural context and therefore provide a useful means of picking up on social and political messages about the nature or transmission of policy discourses across stakeholder perspectives. Hence, this approach to interviewing allowed me to capture how relationships among individuals, policy goals and implementation may have changed over time; explore how the different discourses identified through early documentary analysis influenced policy development (stages 1 and 2 of Parker's framework, page 73); and begin to identify institutions and individuals supported or subjugated by discourses and the ideological effects of discourse (stages 15 to 20). I then supplemented this on a person-by-person basis with specific questions arising from documentary analysis and targeted at individuals. Interviews were spaced over a seven-month period (from March to September 2005) to allow for preliminary documentary work and preparation of individual questions prior to each interview. A copy of the topic guide is included in Appendix 6 indicating broad questions, prompts and probes used to direct discussion, and specific questions used across interviews[28].

On first meeting each interviewee, I described my doctoral work, the means by which I had come to study research policy and provided some background on my own role and background. I identified the reasons why I had come to see this interviewee and whether

[28] The broad questions included within the topic guide did not change throughout interviews though, by their very nature, the specific and individualised questions did.

there was any issue/s that I hoped to discuss. The interviewee then had an opportunity to ask questions and clarify points before I gained written informed consent and proceeded with the interview.

In order to elicit stakeholder narratives, I thought it important to find a 'way in' to each interview that was non-intrusive and would facilitate discussion of historical and contemporary influences on policy discourses. Hence, I began by referring to the *Peckham Report*: rather than singling out this document as particularly important, I sought to use this to explore the intertextual nature of policy and facilitate drawing out of historical narratives prior to this point and more contemporary narratives since (stage 13 of Parker's framework). I explained this prior to each interview. Given that the strategy was produced fifteen years beforehand, it was to be expected that not all interviewees had in-depth knowledge or experience of the *Peckham Report*. Where this was the case, interviewees were able to connect with the idea and their own involvement in research at that time or since, often pointing to a period of time when they self-identified as a policy stakeholder and developing discussion from there. Individual narratives that followed were then situated in historical, social, political, professional and organisational contexts embodied by the individual concerned.

This approach proved successful at a practical level. All interviewees engaged with the interview process and many reported afterwards that they valued the time to reflect on and discuss policy in this way. Interviews typically lasted around one hour and ranged from 45 to 100 minutes. All interviews were tape recorded with consent, later transcribed by an independent transcriber with experience of working in the area of research and policy[29] and then checked by myself and amended as necessary. As my research was not concerned with in-depth linguistic analysis I did not record microanalysis of speech such as pauses, intonation or overlap of speaking. Rather, the approach simply included all spoken words, detailing who was speaking at any one time (interviewer/ee). An anonymised section of interview transcription is included in Appendix 7 to demonstrate the approach used.

At the start of the interview, three interviewees requested that transcripts be sent back to them to review for any sensitive material. In each instance we negotiated that, although I would be unable to remove data as such, if they indicated any parts of the transcript

[29] The transcriber signed a confidentiality agreement prior to beginning any work within the study.

that they did not wish to be directly cited (their main concern) then I would ensure that this did not happen. For each of the three transcripts, I shaded the section/s highlighted by the interviewee in yellow on all electronic and hard copies of transcripts to ensure I did not cite them.

c) Analytic work

To arrive at a stage that could be called 'the Analysis' is a somewhat arbitrary milestone as, by this stage, I was already immersed in analysis. However, to avoid the trap of falling back on broad descriptions, I wish to use this section to demonstrate that analysis was more than simply a careful description or elaboration of implicit themes and involved careful application of the framework to identify discourses.

I began analytic work by focusing on current debate, strategy and policy and then worked both horizontally (across texts) and longitudinally (through time) to search for clarification, explanation and answers to specific questions. I made use of the artificial boundaries I had constructed earlier, beginning with *Research for Patient Benefit* (see Box 6 on page 84) and then working backwards to make sense of the unfolding of primary care research policy over time.

I focused on documents first as they represented the production of policy at any one moment in time. Having recorded all notes relating to documents within extraction forms. I began by reading and re-reading these for all documents sampled and working towards a) identifying policy discourses; and b) considering how and why policy discourses had unfolded over time. I started to look for interesting features, develop intuitive hunches and identify themes across texts; often returning to original documents to clarify further. This early analysis of policy documents assisted in identifying broad discourses both within individual documents but, more importantly across time. As documents provided an important starting point for analysis, often raising more questions, interviews then provided a vital source of data in which to seek additional answers and more fully distinguish discourses. Hence, I asked deeper questions of the interview data informed by a) documentary analysis and early identification of discourses[30]; and b) specific questions of the data in seeking explanations for this

[30] Such as 'when and how did globalisation become a dominant discursive force in shaping research policy' and 'what institutions and people are supported (or not supported) through employment of the discourse?'

discursive activity[31]. This reflected a) the nature of the topic guide structured around broad narratives and facilitating identification of discourses and b) specific questions raised in relation to individuals' roles and experiences facilitating further explanation. To fully appreciate the textual data generated within interviews, I began reading and re-reading interview transcripts, often whilst listening directly to the digital recording of each interview and checking out intuitive hunches against the data.

I made a conscious decision *not* to use computer assisted qualitative data analysis software to assist in the process. As the data appeared so rich and varied I felt it was important to remain immersed within it, rather than remove myself from it through use of an additional electronic interface. Instead I recorded all my notes regarding interviews initially within the transcripts and a dedicated research notebook, before using a system of coloured index cards to record themes, explanations and discursive features. I did this on three separate occasions to try and attend to different policy discourses and social and political relations associated with artificial boundaries (see page 83). As analysis progressed, I moved away from transcripts and used notes and index cards as aids for making sense of the data (but returning to the transcripts as needed). This approach had the advantage not only of keeping me close to the data at all times but also of providing a means of physically *seeing* large parts of the data at any one time (there really was no substitute for simply laying out data on the floor in front of me and being able to move it around to explore (dis)associations).

In this way, it was policy documents that initially led my analytic work, with interviews and supplementary information then providing additional clarity and specific answers to questions raised by the analytic process. This was an iterative process: questioning of interview data led me back to original documents and extract forms that then led me to interviews and other contextual information (see below) and so on. I continued this until a sense of cohesiveness was reached, when writing my own research text began to make sense (see subsequent section d) Writing to make sense).

To further facilitate analysis, I adopted a number of methodological strategies. This included, 1) development of strategies to interrogate or question the texts identified; 2) inclusion of additional background and contextual information; and 3) importing theory

[31] Such as, 'why the Pharmaceutical Industry Competitiveness Task Force emerged when it did?' 'What led the House of Lords Select Committee on Science and Technology to recommend a strategic approach to NHS R&D in 1988?'

to further facilitate the process of interpretation. I describe each of these below, along with the practical (but essential) stage of stepping back.

i) Analytic sensitivity and strategies for questioning data

Part of the strategy of sense-making involved developing sensitivity to the way in which language is used. Schenkein refers to this process as 'analytic mentality' insofar as it involves the employment of a range of intuitive skills and a way of looking at texts (Schenkein 1978). Although these skills are tacit and do not lend themselves to procedural description, they are not mysterious and develop through practice and example (Widdicombe 1993). This involved re-learning 'how to read': moving beyond academic training which teaches people to read to gain a general picture and to enabling close and critical reading of texts. Adopting strategies to explore and question texts, and develop a critical stance towards them, aided development of an analytic mentality. Such strategies were evident in the data extraction form (see Appendix 4) that provided an interpretative tool for interrogating policy documents. This was supplemented by the additional strategies described below.

Focused questions

As I worked through analysis and writing up I found it useful to have a copy of Parker's framework (page 73) in front of me. This served as a constant reminder of the stages of identifying discourse/s. However, I found that I needed to ask more practical questions of the data as opposed to simply considering the conceptual stages described in the framework. I therefore made use of a series of focused questions to scrutinise texts, presented in Box 7. These questions emerged from the theoretical and methodological approach described so far and particularly from Parker's framework.

These questions built on those already included within the data extraction form but allowed me to continue questioning the data extracted from policy documents, as well as considering this in relation to interviews and the additional contextual material collected (see below).

Box 7: Questions used for scrutinising texts and assisting in the identification of discourses

- What are the dominant discourses?
- How have discourses evolved over time?
- What ideological effects might they have?
- How might these tie to broader cultural and political power?
- What social and political relations enabled discursive development or change?
- How have power relations changed?
- What evidence, if any, is there of resistance to these discourses?
- What kinds of positions are set up?
- What type of world is constructed here?
- What type of subject is constructed here?
- What is not said in this passage / section that might have been?
- To what problems might these responses be solutions?
- What concepts are constructed as taken for grant or obvious?

Comparing, contrasting and substituting

The simplest way to gain an impression of the nature of a text was to compare it with other texts. This was built into the nature of my work through the use of multiple policy documents and interview texts that I actively compared by asking for instance, in what ways the text being studied is different from other texts and what are the consequences of this? The incorporation of additional contextual information (see below) facilitated this further. This was not only useful in progressing analysis, but was also theoretically consistent with the discourse analytic approach adopted in that it reflects the idea that a statement always gains its meaning through being different from something else that has been said or could have been said (stages 11-13 of Parker's framework).

I used the strategy of comparison to explore how things might be different, how words or phrases might carry different meanings, how different events came to represent different discourses (as opposed to cohesiveness often presented by policy). To facilitate this I often used hand-drawn diagrams or lists that juxtaposed different perspectives, approaches or discourses to provide insight into how texts contrasted against one another. Where I came across sections of text or individual words that appeared to carry import I also substituted language, explored connotations and considered alternatives

(ensuring this was undertaken within the local context of meaning) (stage 6 of Parker's framework). This introduced to the analysis an unravelling of the means by which policy suggested that primary care research should proceed; what primary care research should focus on; appropriate roles for researchers; and ideas about measures of success (Yanow 2000). This helped me to consider what might have been said and how things might have been different. It also helped me to consider and explore the means by which words might be transformed into new meanings. For example: 'innovation' has generally been used to communicate ideas about modernisation or improvement: by exploring new connotations and associations I was able to identify a shift in the meaning of innovation in the late 1990's that was associated much more closely with modern scientific development and economic productivity.

I was also able to use the strategy of comparison to identify competing conceptualisations across policy stakeholders. For instance, it became clear from reading and re-reading interview transcripts that different stakeholders hold different views relating to the economic viability and competitiveness of primary care research: comparative analysis led to presentation of three separate but simultaneously held views on this issue presented in Chapter 8 (page 150).

ii) Additional background and contextual information

As I attempted to uncover the emergence of discourses and seek explanations for these, it became increasingly clear that broader contextual information was needed to describe and explain discursive activity. This was with a view to framing events and providing contextual appreciation of historical and contemporary policy discourses and was particularly relevant to the findings on the emergence of primary care research and the relationship between science and government (see Chapter 7). With hindsight, this was unsurprising: much of the social and political struggle associated with policy development is not recorded in policy documents alone. I was therefore drawn to what might be termed 'secondary material' - broader accounts and records – to make sense of developments and provide important contextual data on shifting policy discourse/s.

I had already drawn up a detailed list of policy documents in the early stages of my work as a tool for sampling documents (recording titles, dates, authors and overview) that included a separate space detailing references across documents. This provided a rich source of supplementary information. However this was largely focused on policy

developments since 1971. Hence as my work led me further back in time, so I sought out additional background information. In this respect I was led by the data and the emerging need for additional social and political context or background. For instance, it became clear that I needed to appreciate the emergence and development of government science policy and this led me to early reports and descriptions and chronologies of events (such as Wilkie's (1991) account of British science policy following the Second World War).

References to additional information are made clear throughout my findings chapters and included within the main bibliography. In addition, findings chapters include detailed footnotes to guide readers and provide descriptions as needed. To gain a sense of the breadth of material impacting on policy discourses, I also developed an historical chronology of documents and events over more than a century (see Appendix 3).

iii) Importing theory

Following Fairclough (2000), in addition to the grand narrative associated with poststructuralism that that my research is grounded within I sought to engage in dialogue with middle-range and local social and political theory to further illuminate the means by which policy discourse and notions of 'research' are constructed and regulated. I imported such theory into my work that was complementary to the poststructuralist approach adopted, thereby ensuring theoretical consistency. I regarded this as a critical aid to the sense-making process that provided an essential lens through which I could better observe and explain my data. I describe these below.

Discourse theory

I have already described my theoretical and methodological approach to discourse analysis that I draw on throughout. There are two additional theoretical constructs that I imported to further enhance analysis. Both of these draw on the work of Fairclough. Following Habermas, he distinguishes between strategic and communicative discourses to differentiate between discourse that is a) oriented to instrumental goals and getting results, and b) oriented to reaching understanding between key players (Fairclough 2001). I have used this distinction to aid identification of how primary care research is positioned within policy (i.e. strategically or communicatively). I have also introduced the term 'field of relations' (following Bourdieu, cited in Fairclough 2000a) to assist in explicating social and political influences on discursive activity. Here a 'field' is a

network of practices within a particular area or areas of the social and political world. A field of relations then relates to the social and political relations of power in which the external boundaries and internal structure of the field are described or drawn (e.g. clinical medicine) (Fairclough 2000a).

Theorising research

Given the focus of my work, basic questions emerged within my analysis about the nature of research. The development of policy around scientific research over the past century in particular has been largely based on a widely accepted dichotomy between 'basic' and 'applied' research. To challenge this institutionalised view of modern scientific research, I introduced Stokes' (1997) re-theorisation of the nature of scientific research. Adopting a more socially relevant stance, Stokes reconceptualised the means by which we can think of different types of research and how they relate to each other. He advocated replacing the linear model (beginning with basic research and leading through a development pipeline to applied research) with what he referred to as Pasteur's Quadrant that remodelled the research process to *combine* the quest for fundamental understanding *with* consideration of use. This in turn, revised links – at a theoretical level at least - between scientific research, technological innovation and development; as well as the means by which policy conceives and addresses these.

Social regulation

Given the focus on policy it was important to unpack government strategies for developing power by which individual researchers and research groups or organisations might be directed, managed and monitored. To explore this, I introduced Foucault's approach to social regulation: governmentality (Foucault 1986).

Governmentality is essentially a practice of social control. The key lies in encouraging new norms and values associated with regulatory mechanisms that transform the conduct of individuals and organisations that, in turn, embody the machinery of government. Political objectives are achieved through 'action at a distance' as a result of contact between Foucault refers to as 'technologies of power' (those dominating others) and 'technologies of self' (those constituting the individual). This results in a decentralisation of power whereby individuals play an active role in their own self-governance. It is characterised by neo-liberal political rule in modern societies that champions individual rights and freedoms on the one hand, but shapes the conduct of

populations through the deregulated market on the other. Surveillance plays an important role with 'expert' knowledge providing the means by which people are surveyed, measured against the 'norm', trained to conform against the norm and then made productive (Lupton 1999). For instance, having moved away from the state provision of welfare services, neo-liberal approaches have attempted to reconstruct the unemployed to be more entrepreneurial and self-responsible through return to work programmes that redefine unemployment in relation to 'jobseeking'. Similarly, it has recently been suggested that critical incident reporting has been transformed from informal, 'off the record' talk to structured, obligatory confession that is scrutinised by inter-professional teams through the lens of organisational norms and values (Iedema et al. 2006, cited in Greenhalgh 2006) .

To explicate these ideas further, I introduced the concept of New Public Management, a form of governance characteristic of modern westernised society and associated with neo-liberal politics. I drew on the work of Shore and Wright (1999; 2000) and Power (1997) to illuminate the means by which modern forms of audit and assessment might be used to inspire new norms and values in research through which regulatory mechanisms and organisations can transform the conduct of individuals and organisations involved in primary care research[32].

iv) Stepping back

According to Parker, as discourse analysis proceeds it is essential to step back a number of times to make sense of the statements about the theoretical framework being used (1992). In light of this, regular contact and discussion with supervisors and colleagues was essential, not least in exploring connotations across texts and the different terms used to describe discourses (stages 2, 13 and 14 of Parker's framework, page 73); teasing out how and where policy discourses emerged and overlapped (stages 1 and 2); and the different objects constructed by policy discourses and the meanings attached to them (stages 7, 8 and 12). It also facilitated a deeper questioning relating to, for instance, changes in the distribution of power and the implications of this for the interplay of public policy and legitimacy (particularly relevant to stages 15-20).

[32] Although Power is not explicitly located with a poststructuralist framework, his analysis draws on ideas and concepts that are familiar to such an approach including historical analysis to reveal the formation of 'accepted' ideas and practices; the rise of new public management as a dominant form of public administration, and the means by regulation and governance have become internalised.

Stepping back also ensured I read broadly, drawn to a range of texts relating to, for instance, a social constructivist approach to policy analysis, approaches to governance, debate/s relating to primary care and research, and organisational studies; often re-reading some of the key works cited to try and elucidate meaning in my own work.

This was an important part of the iterative research process. It was invaluable in keeping me focused on my research questions and theoretical approach and ensuring I was answering questions and seeking explanation as I went along.

d) Writing to make sense

Following Yanow (1996), I consider writing as a methodological issue. She describes the process as follows:

> "Once we move...to a world in which multiple, even incommensurable meanings are the rule and social science is not seen as mirroring reality, 'writing up' itself becomes, if not a form of research as data collection, a form of research in its presentation or representation of data." (1996:52)

I do not see qualitative (or indeed quantitative) research as tidy and cohesive but, like policy, as inherently messy, emergent and interpretive. Writing offers an important stage within this emergent process of sense-making, an extension of the analytic process, that warrants description.

The creation of a dedicated text for making sense of my research data was integral to the sense-making process. It allowed me to bring together data with queries, theories, concepts and strategies, whilst being placed within Parker's framework (page 73). I set up one word processing file as a space to write about findings, working through several versions of the file depending on my stage of analysis and writing. This represented an invaluable alternative to using computer assisted qualitative data analysis software, providing a single space for systematically recording thoughts and ideas within text and one in which I was always 'close' to the data.

Having already undertaken considerable analytic work, I began to write, continuing to test hunches against the details in the data, whilst maintaining a critical eye on the data and my interpretation of it. I continued to work with the artificial boundaries I had constructed earlier, writing about most recent policy first and working backwards, recording queries within the text where I needed to clarify, for instance, how or why a

discourse had emerged, further explore the social and political field of relations around a particular event or discourse, or the way in which a discourse was discussed or described across documents. I made extensive use of electronic notes and memos to ensure each point was recorded and addressed and continued drafting and redrafting my analyses, exploring and comparing extracts and being aware of counter examples.

It was at this point when the artificial boundaries I had constructed began to dissolve. Having used these boundaries as a means of identifying discourses, I naturally came to a point in my writing / analysis where, instead of structuring my writing temporally and exploring links across artificial boundaries, I reconceptualised and restructured along discursive lines. This resulted in the broad structure presented in the subsequent section on findings (the first chapter of the section detailing emergence of primary care research and related policy, followed by three chapters focusing on the major discourses identified, and one final chapter focusing on the policy process). From here I continued writing, reading, thinking and analysing, continuing to bring many of the strategies described into play, until I produced a version with which I was satisfied.

i) Approaches to writing qualitatively

Scientific writing is traditionally assumed to follow an objective and precise format that is both unambiguous and transparent, in the sense that it provides a reflection of an objective reality. This is heightened in relation to the traditional doctoral thesis that brings with it a whole set of rules and conventions relating to academe. Delamont and Atkinson argue that the thesis represents a vivid process of textual enculturation:

> "Whereby the certainty and facticity of the natural world and its investigation are affirmed." (2001: 103)

They are particularly concerned with laboratory or field science and argue that the aim is to present what has 'worked', producing stylised accounts of research and reflecting the normal paradigm of scientific literature (i.e. those that fail to describe the vagaries of the research process such as practical difficulties or personal incompetence (Delamont & Atkinson 2001)). Hence accepted forms of textual production become reinforced by doctoral rules and conventions. However, qualitative researchers are often drawn to their area of work in response to the way in which human experience is characterised as de-contextualised (Norris 1997). Hence, although my thesis follows the standard format of academic and doctoral reporting, I have attempted to present this in a way that

captures the deeply qualitative nature of my research. This has included presentation of a natural history of methods (Becker 1958) within this chapter providing readers with a contextualised account of methods. I adopt a similar approach in relation to findings that accentuates the qualitative nature of my research and facilitates the historical location of discourses (stage 1 and 2 of Parker's framework). I also make use of the first person within my writing, where appropriate, to avoid (wherever possible) the depersonalisation of the research process and to encourage readers to be active in their interpretation of the text.

I have sought to provide readers with a rich, descriptive account of my research findings that grounds analysis within the data itself. In this respect my work reflects that of writers such as Foucault who regard texts, not only as part of the research process but also as a vital means of communicating alternative interpretations of them. In other words it is not sufficient simply to provide a description of analysis: readers must clearly locate analyses within textual examples (stages 5 and 6). The process of choosing extracts from the texts studied became clear as analysis and writing up progressed. Following Harper (2003), I asked myself a) which were the shortest extracts where a particular position was most clearly demonstrated? b) Which could be understood most easily without having to refer to the wider context of a particular document or interview? And c) which gave the most diversity in terms of the range of documents and policy stakeholders included within the research and in terms of variations on storylines, discourses and themes?

These textual extracts helped to provide readers with an apt illustration of the data to locate analyses and to make situations come alive. This has been particularly important given the full range of texts that I have uncovered and explored. I approached the process of writing in this way in order to make the implicit explicit: apt illustration combined with theoretical linkages to wider literature might facilitate the transferability of findings as readers recognise themselves or others within descriptions (Morse 1997).

5.5 Summary

I have outlined a method of discourse analysis with its roots in poststructuralism and, following from this, described an approach to making sense of my research questions and the data that flows from them by drawing on a twenty-stage framework for distinguishing discourses (Parker 1992; 2002). I have provided readers with a rationale

for the use of this framework and throughout this chapter I have drawn attention to the stages of the framework to provide a comprehensive account of the research process and methods adopted including: the collection of texts (including policy documents and interviews); the development and application of analytic strategies and processes (including importing theory); and writing-up. I have presented this as a natural history of methods to capture the iterative nature of the work that does not easily lend itself to a process-oriented description.

* 6 *

REFLEXIVE ACCOUNTING

6.1 Introduction

Whilst it is tempting to side step such problems, it is impossible to escape some philosophical questions regarding the nature of truth and the assumptions influencing research design and conclusions. I adopt what might be termed a weak social constructivist position in which human beings do not discover knowledge so much as construct it and, following from this, I maintain some concept of reality as existing outside of discourse and texts[33].

From this perspective, knowledge is not disinterested or apolitical and interpretations are not constructed in isolation but in an environment of shared language, understandings and practices. My own knowledge and abilities that framed and facilitated discourse analysis were less reliant on notions of objective, empirical and knowable science than on qualitative and historical, sociological, political and critically reflexive research. I illuminate this process within this chapter by discussing the role of reflexivity in relation to the research process and reflecting on my own position/s as researcher in order to make clear the foundations upon which my interpretations are based. I consider criticisms and tensions relevant to my research (Baachi 2000; Burr 1998; Parker 1992; Parker & Burman 1993;) and employ a process of reflexive accounting to describe how my research addresses these.

6.2 What is reflexivity?

I consider reflexivity to represent a reciprocal link between my own interest/s, the provision of data and the theoretical resources employed to analyse this data. My approach to reflexivity is shaped by two guiding principles. The first of these

[33] When I use the term 'weak social constructionist' I mean that I do not agree that those who adopt a relativist position and retain *no* concept of 'that which is real' (Burr 1998).

acknowledges that as social constructivism is itself a social construction (Burr 1998; 2003), there is a need to pay attention to my own knowledge-making practices in relation to primary care, research and policy, and ensure an honest brokering of the influence of historical, social and political contexts in which I am embedded. Secondly, as the title of this chapter suggests, reflexivity presents a means of accounting for my analysis. By critically examining pre-suppositions, preconceptions and unexamined techniques for sense-making, reflexivity might aid accountability by making interpretive resources and processes available for evaluation (Woolgar, 1988).

I have already provided a detailed account of the internal workings of my research (see Chapter 5) that draws attention to analysis as a struggle for making sense of the worlds of primary care, research and policy. This process of sense-making involved making a wide range of choices and decisions that influenced the work of interpretation and that needs to be made explicit. The detailed 'natural history' of methods in Chapter 5 is one attempt to do this, but there is also a need to explicate the influence of my position/s as a researcher on this process. This is particularly important in light of a) the multiple positions that I occupy (for instance, as researcher supported by the DH, student, non-clinician, sociologist), and b) the argument that policy analysts who describe policy as discourse tend to have some sort of agenda for change (Baachi 2000).

6.3 Reflections on studying policy discourse

In light of the above, I describe my own position/s within the research under the headings below, explain how these have influenced the research process and make clear my own agenda for change.

a) Opportunities for critical, policy oriented work

I am a social scientist with a background in medical sociology, business and finance, research facilitation and health services research. I have a breadth of interests and experiences across a range of other disciplines (such as social policy, political science, medicine) and methods (focusing largely, but not exclusively, on qualitative approaches). All of these experiences have informed my personal and professional development and my approach to research and policy.

I successfully sought funding from the DH for my doctoral work on the basis of exploring research management and governance in primary care and was all set to

undertake a series of in-depth case studies with/in primary care organisations. But there was something nagging away at me: I knew I had missed something. I went to the University of London Library at Senate House and browsed. I eventually found myself in Politics where I serendipitously discovered *Reframing Public Policy: Discursive Politics and Deliberative Practices*, encapsulating a post-empiricist approach to policy analysis that allowed for the construction of policy through language and discourse (Fischer, 2003). This book was important in showing me the potential of a discursive approach to policy analysis, one that offered an opportunity to explore policy from a critical perspective and using innovative methods. It enabled me to conceptualise a different research journey and justify a radical overhaul of my doctoral project. Emerging from this early 'discovery', subsequent reading around this area then influenced my adoption of a social constructivist position, discourse analysis and qualitative methodology.

Whereas my previous research had lacked a critical reflection on the policy process itself, the potential of a discursive approach reshaped my research question/s to focus on how and why research policy relating to primary care has been constructed in the manner it had. This built on three areas of concern: the influence of social and political contexts on development of healthcare; the lack of evaluation of, and appreciation for, policy initiatives relating to primary care research; and the tension between an increased focus on evidence-based policy and the limited collection and use of 'evidence' for such policy relating to primary care research.

b) Researcher researching research

Other factors relating to my own experiences were also influential including my employment as a non-clinical primary care researcher; my involvement in a series of research projects focused on researching research; and my general interest in social constructivist approaches to the study of health and healthcare. A consequence of this was my choice of topic – primary care research – and my interest in adopting a theoretical and methodological approach that allowed for the construction of research to be explored through multiple perspectives.

Of all these personal experiences, my position as a non-clinician within a largely clinical academic department was probably the most influential in shaping what might be conceived as an agenda for change. The experience of working within a largely

clinical world as a non-clinical researcher has shaped my individual perspective relating to, for example, differential opportunities for career pathways and rewards in relation to professional, as opposed to research-based or methodological, qualifications. It was impossible to ignore this aspect of the social and political world in which I am located: examination of policy relating to primary care research suggested that different clinical and non-clinical research and research roles were positioned by policy in different ways[34]. Although my research provided an opportunity to challenge this I sought to ensure that this was addressed from a theoretically and methodologically informed standpoint as opposed to one purely based on personal opinion or experience. The supervision afforded to me within the research provided an important balance: my main supervisor was both clinical (being an active general practitioner) and sociological (having undertaken a first degree in social and political science). This mix of clinical and non-clinical views informed our discussions and comments on work in progress to ensure that arguments were grounded in the texts studied and that I avoided using extreme examples to support particular views or opinions. I also discussed my work throughout with colleagues across clinical and non-clinical disciplines and this helped me to assess the acceptability and justifiability of particular arguments.

My roles as researcher and discourse analyst led to a curious dualism whereby I began to feel as if I was living in different worlds. This was heightened by my analysis of the very world in which I was working, studying and researching. Throughout my work I continued to sit within two policy groups: the NHS Research and Development Forum Primary Care Working Group; and the management group of Primary Care Research Team Assessment[35]. Although my wider participation in the policy process was not included as a formal aspect of the research process, it has undoubtedly impacted on my process of sense-making. At the very least it afforded insight into the policy process and ensured I was up-to-date and aware of new documents, events or perspectives. However, my role within these groups meant that I was positioned as an academic researcher responding to what was often portrayed as rationally conceived policy of the time whilst at the same time acting as doctoral student adopting a critical stance towards such policy. The focus of both groups required only a broad appreciation of the political environment of primary care research, as opposed to critical reading within and across texts. In this sense there was a danger that I would be led away from discourse analysis

[34] For instance, some of the texts studied adopted a narrow and largely clinical view of primary care research and associated roles.
[35] Based within the Royal College of General Practitioners and supported by the Department of Health.

and towards a more unquestioning analysis of texts with little appreciation of the historical, social and political contexts of research policy. As I progressed with my analysis and writing I therefore elected not to attend meetings and set clear boundaries on my contributions to committee-related work. This allowed me to develop my analytic sensitivity (see page 94) and adopt a more critical stance towards the data.

It was impossible to disengage myself entirely from the different roles I was positioned in. However, one other means of working effectively with this dualism was to begin to demarcate my positions as researcher and student. I began to identify situations, spaces and events in relation to my own roles and responsibilities and to delineate the work I undertook within each. I identified physical spaces where I was able to position myself as academic researcher (the university department, committee meetings) or as doctoral student and discourse analyst (the library, doctoral groups, working at home). Over a period of a year or more I was able to move between these spaces and positions with some ease, which in turn facilitated my immersion within the research data and my analytic sensitivity.

Reflecting back on this process I feel this was an important means of being able to make sense of the data as fully as possible. Situations and events that further aided this process included discussions with my supervisors and colleagues, reading others' work, and discussion with others at conferences and informal seminars. This helped me to maintain a sense of curiosity about what might otherwise have been self-evident.

c) Encounters with power

The fact that I knew some of my interviewees professionally presented particular challenges. Despite the assertion that it can be easy to criticise individuals in positions of authority, at times I found it difficult to unpack interview texts in view of the fact that all interviewees were in a powerful position within the system and relative to my own[36]. This was heightened due to the closeness of the research to my own position as researcher. Many interviewees were people I might encounter not only in professional arenas such as conferences and meetings, but also in relation to my future career progression. Despite this I still thought it possible to be critical of the assumptions implicit in their policy narratives. However, it became clear early on that some texts

[36] This was particularly relevant to my contact with the Department of Health who also controlled the funding of my research; though less relevant to my contact with those interviewees who were retired and/or providing in-depth historical perspectives.

were more difficult to unpack than others because I tended to see them as more accurate descriptions of 'reality' that often matched my emerging views. Given the discussion above relating to my own agenda for change, this was particularly the case in relation to my interview with a non-clinician working within primary care research.

When considering interviews as part of the process of data collection, I acknowledged that interviewers as well as interviewees play a number of different roles that impact on the data collected and subsequent analysis (Chew-Graham, May, & Perry 2002). My role as junior researcher and student informed my decision to approach each interview from a position of relative naivety. This is the role I explicitly adopted at the outset, with interviewees positioned as more knowledgeable and therefore encouraged to relate their detailed narratives. I related this at the start of each interview and also used phrases such as: "this might appear a naïve question...." in order to encourage depth of explanation. This appeared to facilitate the relating of narratives. Although this was a relational process with narratives produced through conversation and interaction (Muller 1992), prompts and probes within the topic guide (see Appendix 6) were only used as a reciprocal tool to allow for the telling of the story, as opposed to directing it. My position of 'naivety' appeared to encourage detailed accounts with some interviewees even checking that the level at which they pitched their story was suitable to the requirements of my research.

In relation to analysis of all textual data, I once again entered a dual world. Having been funded to undertake my doctoral work by the Department of Health and hopeful of future support, I found it difficult to place myself in a highly critical position of this institutional structure, whereby my own position as a future academic researcher might be jeopardised by the messages emerging from my work. On the one hand I did not want to assume an arrogant position - believing that my work would reach a wide enough audience for this to matter - but on the other I did not wish to 'bite the hand that feeds me'. Several reflexive strategies helped with this: firstly my identification of spaces from which to work more effectively in particular roles (see pages 106 to 108); secondly, through the process of stepping back (see page 99 to 100) I returned to my research questions on a regular basis to remind myself of my aims and objectives and of the need to focus on these; and thirdly (again through the process of stepping back) I returned to the theoretical literature around discourse analysis to read how others had addressed this or faced similar concerns. Lastly, rather than applying to the Department

of Health for funding to support my work beyond my PhD, I elected to apply to an alternative body: this was partly the result of opportunity but also allowed me to place such concerns to one side whilst completing my thesis.

d) Fact construction: telling the story straight

Writing represented a form of inquiry, a means of making sense of the world of primary care research policy, and of constructing a linear, readable account of my research findings. In the early stages of analysis and writing, I began to try to account for every decision made. However I soon realised that my own research practices were being shaped by the very discourses I sought to uncover and challenge. In other words my own conceptualisation of the research process was/is influenced not only by ideologies of management and the practices associated with audit and measurement, but also by the quantitative and clinical research cultures that dominate modern health research. Having realised this, I reminded myself of the value of analysis grounded in social constructivism: although contestable and value-laden there are standards for judging the validity of interpretation that do not plunge us into irrationality and subjectivism (Jennings 1983). I have attempted to demonstrate this within Chapter 5 by describing the different stages of the research process and the analytic strategies and tools employed (such as the document extraction form, use of supplementary material or importing theory). 'Stepping back' provided a means of assessing my work at different stages and in contact with others: I presented my work at several multi-disciplinary forums and whenever possible discussed emerging findings with supervisors and colleagues.

I also considered the authenticity and plausibility of the research presented. In relation to telling the story of primary care research, as I continued to work on my analysis, I repeatedly asked myself whether I had been respectful of the full range of views and approaches, especially given the breadth of narratives and texts collected. I sought to ensure a balanced account by purposefully not including any analysis of the verbal or rhetorical construction of interview texts: this avoided the trap of detailed criticism of individuals. I was also painstakingly thorough in maintaining confidentiality and anonymity of participants (despite an argument that many, if not all, were in public positions and might be expected to provide publicly accessible narratives).

I was aware throughout of writing as a process of fact construction. My own use of metaphor to describe findings, the need to clearly demonstrate rationale for analytic decisions as to what should and should not be included; and use of my own persuasive and rhetorical devices were important choices that needed to be accounted for. I therefore sought to ensure that I was not presenting extreme or isolated examples of any particular concept (unless appropriately so and informing the reader that this is the case). Given the number of texts studied it was impossible to know or to cite every document that employed or embodied particular discourses (nor was it my aim to do so): instead I selected out from those I knew to indicate a broad illustration of the discourse or field of relations and in several instances presented a range of examples to ensure this breadth was well illustrated[37]. There were however instances where one reference to a discourse might be interpreted as vitally important to the emerging story and where this was the case I elected to include textual example/s and indicate the limitations accordingly.

Although participant validation of a researchers' account might provide a useful standard for quality control (Burr 1998; 2003), I chose not to pursue this for two reasons. Firstly, the nature of my research was not attempting to provide an account that fits with interviewees' experiences (as ethnomethodologists might seek to do); and secondly my research sought out a breadth of texts that had not been previously studied in their entirety: to request individual participants to somehow validate their accounts when situated within such a broad textual landscape seemed unreasonable in terms of expectation and time.

6.4 Summary

This chapter is an extension to the preceding chapter describing a natural history of methods. I have restated the epistemological position I have adopted within my research and acknowledged that I am a part of the social and political world that is the focus of my research. I have not sought to engage in depth with the intricate and continuing debate around realism and relativism, but simply to illuminate some of the tensions within discourse analysis and offer readers a reflexive account of my own role/s within the research process. I have highlighted how discourse analysis involves choices, described the choices I have made and reflected on the influence they have had on the

[37] For example, Box 13 on page 175 provides readers with examples from across documents relating to the means by which corporate discourses associated with the pharmaceutical industry are sustained.

research. I have done this with a view to enabling an informed and contextual appreciation for the findings that follow.

SECTION FOUR:

FINDINGS

* 7 *

EMERGENCE OF RESEARCH

71 Introduction

Given the emphasis on discourses as embedded in history, this chapter explores the emergence of primary care, research and science policy more broadly. In doing this it seeks to make sense of current events and situations (or references to them); lays the foundations for exploring tensions between competing ideas and practices (such as applied and basic research; social, clinical and behavioural research practices; or public and private research institutions); and describes the social and political events leading to the emergence of primary care research, related policy and attendant discourses. These discourses are then explored in greater depth in subsequent chapters.

7.2 The family of modern medicine

Primary care is often used within our current vocabulary as a catchall term, conveying an image of a substantial part of a healthcare system whilst lacking a delimited boundary. It is often used uncritically, with little appreciation of the complexities it holds (such as the vast array of social, psychological, medical or behavioural problems that might be presented to a similar array of clinicians, practitioners and receptionists). It is often coined in relation to general practice: as general practice and primary care (rarely primary care and general practice). And the terms general practice and primary care are also used in an interchangeable fashion. But what does this language actually convey?

a) Deconstructing primary care

The language of primary care captures an organisational or structural element representing entry into the system of medicine (for instance, via NHS Direct, the local pharmacy, a general practice or walk-in centre) and the practice of clinical generalism.

Although the work of clinical generalism tends to be most closely associated with general practice and the work of general practitioners, this work might actually be undertaken by others (such as nurse practitioners). It might also just as easily be practised on hospital wards. Indeed the symbolic and traditional image of clinical generalism - the local general practitioner in his single-handed practice – is increasingly being challenged via new structures for the delivery of such healthcare (for instance, the establishment of walk-in centres within train stations or other commuter haunts).

Although this basic deconstruction might appear obvious it was rarely discussed or addressed in the documents studied. And yet it deserves greater attention. Primary care and clinical generalism represent different starting points within any clinical encounter or pathway. And these different starting points determine what questions are asked and what action is taken, not only in terms of any individual encounter, but also in terms of the surrounding research agenda. I grapple with these ideas in the sections below by turning my attention to the historical development of general practice in particular, emergent research practices and policies and the language that is brought into play.

b) Development of general practice

General practice emerged as an independent branch of medicine via the development of apothecaries (subsequently referred to as general practitioners). This emergence was marked by social, political and professional positioning: as hospitals became the central arena for medical practices from which physicians and surgeons were determined to exclude general practitioners from access to *their* hospital beds, so the Society of Apothecaries and Royal Colleges were intermittently in dispute over restrictive practices and job demarcation (Loudon, Horder, & Webster 1998; College of General Practitioners 1953). The institutional and professional power of clinical medicine successfully blocked early attempts by general practitioners to resist such professional protectionism and to attempt to organise themselves into a delimited area of medicine – clinical generalism - with a defined set of accepted practices (McConaghey 1972) (Digby 1999). For instance, an attempt was made to found a College of General Practitioners as far back as 1844 with a succession of bills presented to parliament throughout the 1840's, none of which were successful. Debate over the need for an academic body to represent general practitioners continued throughout the remainder of the nineteenth and first half of the twentieth century, but it was not until 1952 that the College of General Practitioners was formed. This marked a time when general practice

was organising and defining itself in resistance to the dominant discourse of clinical medicine, with its own body of members, knowledge base, training and defined area of practice[38]. The College provided an institutional locus for the development of systematised knowledge relating to the work of the clinical generalist. One academic general practitioner referred to the time of the formation of the College of General Practitioners as one of brotherhood, reflecting not only on an enhanced a sense of passion and revolution, but also the male domination of this period:

> "Our arguments were fierce, they were fierce but loving, it was an argument between close brothers." (Senior academic general practitioner, retired)

In this light, the College represented a spiritual and revolutionary home facilitating intellectual debate and reshaping the discourse of clinical medicine within the general practice setting. The subsequent development of academic departments and vocational training facilitated this further with research playing an integral role in reshaping established forms of knowledge.

Table 3 shows the delimitation between different medical systems and knowledge that was characteristic of the mid-twentieth century. Rather than representing the emergence of a discipline as suggested by interviewees reflecting on this time (see Table 2 on page 89 for information on those interviewees able to provide historical narratives), general practice appeared based on the emergence of clinical generalism as an identified field within clinical medicine, undertaken outside of the hospital and with a focus on the individual patient. 'Discipline' was used as a rhetorical device by interviewees: to construct a narrative of general practice as resistant to the powerful discourses of clinical hospital medicine (and all its associations listed in Table 3) to attempt to mark it as different.

[38] Following memoranda, extensive discussion and meetings of a dedicated Steering Committee, the College of General Practitioners was founded as an unincorporated association on November 19th 1952, with foundation membership opening on 1st January 1953. Before the College was 6 months old, more than 2,000 practitioners had joined. For an more in-depth description of events see the *First Annual Report* (College of General Practitioners 1953) and *General Practice Under the National Health Service 1948-1997* (Loudon et al, 1998).

Table 3: Characterisations of medical systems and knowledge in the mid-twentieth century[39]

Clinical medicine	General practice
Established	New
Specialised knowledge	Diffuse & uncertain knowledge
Biomedical, mechanistic	Person-focussed
Rational, empirical	Interpretive, problem-based
Organ focused	Focus on illness trajectory
Second-stage care	First-contact care
Hospital based	Community based
Geographically centralised	Geographically dispersed
Professionally 'grouped'	Professionally isolated
High status	Low status
Powerful	Resistant
Gaining higher ground	Disenfranchised

i) The language of general practice

Much of the language associated with general practice development included a rethinking of – or challenge to - clinical medicine in its traditional hospital form. This involved consideration of psychosocial and sociological dimensions, the interaction between patients and doctors and biographical or narrative approaches to research and to patient care. A discourse of adolescent rebellion ran through interview texts with those who contributed to such development emphasising the early development of general practice, the angst and freedom of the era and the upheaval and insurgence this wrought. Table 3 aims to represent this by indicating where power relations were located and what discourses distinguished medical knowledge of that time. There was also a linguistic change (described in Box 8 on page 120) with the explicit use of borrowed language in order to delimit an identity for general practice in the mid-twentieth century.

ii) General practice knowledge

Whereas established clinical medicine spoke the dominant language of specialised biomechanical knowledge realised through the institutional context of the hospital, general practice was not only framed by the natural history of disease as conceptualised

[39] The information provided here is gleaned directly from interviews, policy documents and other texts.

by clinical medicine, but also positioned itself using a different language associated with the patient as central within the medical hierarchy. This was facilitated by consideration of the psychosocial dimensions of medicine embodied within the work of Michael Balint[40], which emphasised experience and emotion within the clinical encounter and the internal life of the individual patient (as opposed to rigid conceptions of medical hierarchy and expertise). General practice was problem-, as opposed to discipline-oriented and therefore embodied a willingness to cross professional and disciplinary boundaries and was heavily influenced by developments within medical sociology, psychology, management studies, and modern public health. Increased attention was given to epidemiology within general practice, partly facilitated by the system of registration across general practice populations, but also embodying a reformist political movement identifying health with different classes of populations and drawing attention to inequalities[41].

The College provided an institutional locus for the development of systematised knowledge relating to the work of the clinical generalist and that helped to transform dominant medical relations. The subsequent development of academic departments and vocational training facilitated this further and research played an integral role in reshaping established forms of knowledge (see Box 8 below). As a practice associated with the emergence of general practice, research represented political struggle and a challenge to accepted notions of worthwhile knowledge:

> "The question was how did you stop feeling a second-class citizen because the first class citizens were the ones who had highly specialised knowledge about syndromes and procedures; the second-class citizens were doctors who had much more diffused knowledge. It was how you made yourself feel first class, that was what mattered. And that was the driver towards me personally feeling that general practitioners needed to raise themselves out of their own imagined second-class status in research and head towards an equal status with specialists." (Senior academic general practitioner, NHS organisation)

In this sense, as depicted in Table 3, the development of general practice knowledge represented a form of resistance.

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[40] Refer to Balints' book *The Doctor, his Patient and the Illness* published in 1957 for an interesting insight into the foundations of this approach.

[41] Readers are directed to the work of Julian Tudor Hart for further insight into development of this approach within general practice.

Institutional recognition of the need for research within general practice to transform and sustain development was embodied in the Research Committee of the College of General Practitioners[42], set up prior to any other and appointing a known researcher as first chair[43]. But attempts were made to undertake research long before this[44], though these were largely uncoordinated and on an ad hoc basis. Like historical documents, interviewees drew attention to individuals who played an important role in developing a system of knowledge for general practice as well as its own institutional and professional practices. Although rare, such individuals were often invoked as research heroes and/or pioneers in that their work represented an historical and political struggle to establish an identity for general practice that still resonates today. For instance, the work of James Mackenzie and Will Pickles (the first President of the CGP) in the first half of the twentieth century presented a challenge to the dominant clinical medical discourse and associated research practices of their day: they drew attention to the different stages of disease (as opposed to only the advanced stages seen in hospital laboratories), and to the need to identify with real patient experiences (as opposed to the subordinate position of medical subjects within the hospital hierarchy, passively accepting treatment in their hospital bed). Early research pioneers (like those described in Table A2 on page 304) were vital in building the epistemological foundations for clinical generalism and in articulating the story for others to take on board. However, even where unusual results of research relating to general practice were produced, the audience was very restricted – few research findings by general practitioners were publicised to more than a local readership before the 1950s[45].

[42] At the time, the RCGP had yet to receive its Royal Charter.

[43] The Research Committee was formed on 23 January 1953, chaired by Robin Pinsent, with a responsibility "to encourage, guide and co-ordinate research into the problems of general practitioners, and to make the College into a centre where family doctors can pool their knowledge and experience."(College of General Practitioners 1953). For a more in-depth description see chapter three in *Forty Years On The Story of the First Forty Years of the College of General Practitioners* (RCGP, 1992).

[44] See pages 304 to 309 for a description of early research and the individuals undertaking it.

[45] Digby (1999) reports that, at the time, most were preoccupied with attempting to keep up-to-date with medical advances through reading Practitioner or the BMJ.

Box 8: Development of general practice[46]

The nature of general practice...
Different notions of general practice emerged encompassing clinical medicine (and the natural history of disease), epidemiology (facilitated via general practice registers), psychosocial aspects of care, medical sociology and a range of other disciplines. These were variously and eclectically drawn upon, forming a distinct identity for general practice and enabling recognition by others. This was reinforced when the College received its Royal Charter in 1967.

Use of language...
General practice consciously used a different language to say "we are different". Such language was borrowed from across diverse disciplines such as psychoanalysis, sociology and management and facilitated commonality and a sense of cohesion or identity. This facilitated discussion of ideas and experiences that others recognised as their own.

Developing a knowledge base...
The College of General Practitioners provided the institutional foundation for academic independence and the production of relevant knowledge via general practice research ideas. This was embodied in the Journal of the College of General Practitioners, first printed in 1958 (Research Newsletter from 1953) that aided development of a contextual and high quality knowledge base: although largely based around clinical and epidemiological research, this provided an important knowledge base to develop clinical general practice. Acceptance of the journal in *Index medicus* in 1961 provided a mark of acceptance by wider medical and social worlds.

General practice education...
The first chair of general practice was established in 1963 at the University of Edinburgh and was followed by a slow but steady development of academic posts and departments. This facilitated the establishment of general practice as a taught subject, aided by developments in medical education, curriculum development and approaches to teaching (e.g. focusing on behavioural objectives). The General Medical Council publicly endorsed the need for GPs to have postgraduate training in 1967. Publication of *The Future General Practitioner* (also known as the 'White Bible') by the RCGP in 1972 provided additional impetus, not only for mandatory vocational training, but also acceptance within wider clinical medicine and in related policy circles.

The internal field of relations that facilitated general practice development is represented in Box 8. This was combined with external political and social transformation wrought by the creation of new institutional forms of healthcare delivery. In particular, the new NHS protected general practice by building it into the healthcare system in 1948: it was agreed that surgeons and physicians would retain control of the hospital whilst general practitioners would keep the patients. This agreement became preserved not only in the formalised institutional healthcare settings of the NHS, but also within the custom of the medical profession itself (Marinker 1998).

[46] The information provided here is gleaned directly from interviews, policy documents and supplementary texts.

In theory at least, it helped to transform the discourse of clinical medicine to include a greater emphasis on the role of clinical generalism. The *Collings Report* (Collings 1950) also marked a significant watershed: published in *The Lancet* in 1950, Collings acknowledged problems stretching over many years and searched for answers to a range of significant questions, such as:

> "What constitutes general practice today? What does the general practitioner do? How does he do it? What criteria have we for judging the quality of general practice? How does general practice integrate with other medical services – hospital, specialist, and preventative?" (page 556)

This field of relations drew attention to the difficulties inherent in defining the work of the generalist and how this was set in contrast to the work of other established medical categories and practices. Hence the future of general practice was being determined with little deliberate consideration of its problems:

> "It is being determined mainly by people responsible for hospital and specialist development, and in terms of compensation for recognised, or half-recognised, deficiencies, instead of correction of these deficiencies." (ibid: 578).

The report also shone a light on organisational and academic weaknesses of general practice, particularly the absence of applicable knowledge based on research relevant to general practice (as opposed to the transfer of knowledge from other medical settings). This gave rise to a greater appreciation of the need for leadership to avoid academic isolation and the loss of general practice traditions, thereby facilitating the institutional rise of the College (with the Royal Charter appointed in 1967). However, the field of medical research remained contested ground. Although recognised by government as an area for inclusion within policy texts, this only went so far. For instance, the 1953 White Paper on *Clinical Research in Relation to the National Health Service* (cited in Wilkie, 1991) represented a milestone with the definition of clinical research referring to field studies in epidemiology and social medicine and observation in general practice. However, despite the potential for optimism regarding the contribution to the field of medicine by general practice the report appeared to remain based on a tacit assumption that medical research was somehow within the sole province of:

> "...whole-time clinical professors and clinical research workers...university professorial units...research units of the M.R.C. and...private research foundations." (Watson GI, 1953: 286, cited in Wilkie, 1991)

This was unsurprising: given the domination of clinical medicine and the lack of government attention paid to general practice previously, it was unlikely that research (as constructed in policy) would be discursively reconstructed to ensure that the production of general practice knowledge was built into the fabric of medical research. Even though the registered list system of the NHS arguably gave general practice a sound basis for research and audit (Royal College of General Practitioners 1992), it appeared that there was little government support to pursue or advocate this as a line of enquiry until the late 1980s and early 1990s.

iii) General practice position

Although the institutional power of the RCGP was significant in (re)shaping medical and research practices, clinical medicine has remained dominant.

Whereas the discourse of clinical medicine has traditionally invoked patriarchal dominance and control over development of the family of medicine; general practice has been associated with newness, emergence and vulnerability. This vulnerability was the language often used within both interviews and documents to describe general practice development: as lacking maturity, always lagging behind more established discourses of clinical medicine. As policy decisions tended to be based on what has gone before, this had implications for the potential of general practice to transform existing power relations. As Collings (1950) raised, not only were the conditions of general practice 'bad and deteriorating' but the decisions of policy were taken relating to hospitals and specialists with little or no regard to general practice.

The ideological foundations of health-related research were those associated with the founding fathers of clinical medicine that influenced what research should entail, the setting in which it was to be undertaken and who should undertake it. These foundations emerged prior to the conception of general practice that has had to struggle to form its own identity. Growth, maturity and familial independence have therefore been explicitly linked to the need for firm roots in research undertaken within general practice and not that transferred from hospital settings:

> "...our knowledge base was flawed because we were treating people with data who came from secondary care and we would never get it right until we had our own research base." (Senior academic general practitioner, NHS organisation)

As general practice research has developed and gained recognition so it has, to some extent, been accepted within and transformed clinical medicine. Most recently, this has not only reflected a shift in the work of the general practitioner as 'biomedical specialist' and 'consultant in primary care' (Greenhalgh, Voisey & Robb, submitted); but also a transformation of work along problem-orientated lines and with a hierarchical structure not dissimilar to that found in hospitals (Charles-Jones, Latimer & May, 2003). Such changes have arguably undermined prior claims of general practice as a distinct field of socially-oriented medicine.

7.3 Development of primary care research

In exploring the emergence of primary care and the relationship to the family of medicine, I characterise primary care as conceived at the time of the general practice's institutional and professional development in the 1950s. This is not to suggest that the language of primary care was in operation at this time but that a system of primary care began to develop once the practice of treating patients outside of hospitals had become formally established. This was further facilitated through the subsequent development of health centres and multidisciplinary teams in the 1960s and the creation of primary care teams throughout the 1970s and 80s (facilitated by improved and shared premises, as well as the attachment of community staff).

Whereas general practice emerged out of resistance to the power of established medical identities and practices, primary care emerged through social, political and economic recognition of the value of structural changes within a healthcare system representing professions and practices with disparate epistemological foundations. This brought together knowledge from different sources including general practice, nursing, public health, psychology and social medicine.

As the language and practices associated with primary care became accepted into wider government, medical and healthcare circles, so a range of research began to be undertaken under the rubric of primary care. Like primary care itself, research in the area was new (to policy) and therefore competing against more established categories of health-related or medical research. Like primary care itself, it was also multidisciplinary, undertaken across a range of organisational settings and, by comparison to established medical research, little understood. This presented a different set of considerations for research and for policy around conceptualisations of, for

instance, interprofessional team working or professional and organisational boundaries, as opposed to research typically carried out within hospital settings involving a number of clearly differentiated specialties. For instance, one senior Department of Health policymaker discussed how this might lead to marginalisation as primary care is marked as different from conventional structures and relationships between teaching hospitals and medical schools.

It was not until the late 1980s and early 1990's that the phrase 'primary care research' came into use within policy. The social and political developments within healthcare wrought by the Thatcher government included a conscious shift towards a primary care-led NHS accompanied by new managerial systems, changes to the GP contract, and a growth in funding for primary care and related facilities[47]. This shift in the means by which healthcare delivery was both conceptualised and managed represented a significant shift in relations between hospital medicine and general practice in particular, but also primary care. The reconstruction of health services facilitated a change, not only in the position of general practice and primary care, but also in the way in which research in the area was conceived and regarded. As one interviewee reflected:

> "...so the research position reflects the position of the discipline." (Senior academic general practitioner, high profile policy input)[48]

Rather than suddenly appearing in the spotlight of medical research, a range of factors brought primary care research to the attention of government and closer to the policy agenda (Box 9 describes the field of relations that enabled this). Despite this, the language of research continued to focus on university departments and teaching hospitals where the primary care research culture was not strong enough to find support. Instead it was represented in streams such as the DH Policy Research Programme that commissioned research in line with priorities. Although this provided a means for primary care research to be addressed, it did not allow for integration within wider health and science policy.

[47] Refer to the Appendix 2 for a summary of events leading up to the development of a primary care-led NHS and GP fundholding.
[48] Refer to page 116 describing the emergence of general practice and primary care for analysis of the use of the word 'discipline' within texts to assist in shaping and defining identity.

Box 9: Shaping primary care research in the late 1980's and early 1990's

Lobbying and debate...

A series of high profile papers and debates focusing on the importance of research in general practice and primary care helped to stimulate multidisciplinary activity in academic departments, and raised questions about why they were excluded from funding streams. Individuals and organisations with strengths in horizon scanning and lobbying played a vital role.

Policy shifts...

Explicit acknowledgement of the previous exclusion of primary and community care from research funds was highlighted within the Culyer Report. Combined with the focus on a primary care-led NHS and the increased purchasing power of general practice, this led to recognition within the research budget of the need to procure evidence to underpin primary care. This in turn fed into an accumulation of impact and influence and the appearance of a new generation of individuals with political acumen and influencing skills.

Research related initiatives...

Small-scale activity (such as funds for developing RCGP research general practices, regional initiatives and training schemes) helped to pump-prime activity; make in-roads into major funding bodies (such as the appointment of MRC Training Fellowships); and facilitate a growth in academic departments.

This was evidenced by the 1988 report of the House of Lord Select Committee on Science and Technology - *Priorities in Medical Research* – and the government response to it (Department of Health 1989). The Select Committee report drew attention to the need for a national strategic body for health research (as others had also suggested before this time), and made a clear distinction between hospital and academic staff and general practice / primary care; and the type of research that each might do. It also embraced a broad conception of research incorporating a community approach, a range of disciplines, clinical and non-clinical researchers, pharmaceutical and medical equipment industries, as well as patients and the public sector more generally[49]. As a key document focusing on medical research , and beyond the confines of the MRC, it crucially drew attention to the imbalance between an emphasis on primary care and general practice as a key means of delivering wider policy and the lack of research programmes aimed at improving and extending potential in this area:

> "The lack of overt reference to primary care research in the White Paper on primary care is to be regretted. The shift towards primary care in

[49] This was evident in considering the contribution of the range of the Research Councils, which had not been undertaken in earlier reports. Discussion encompassed, for instance, the Economic and Social Research Council's support for medical research via exploration of social and economic aspects of healthcare and the Science and Engineering Research Council consideration of biotechnology.

> Government policy should be underpinned by research programmes." (page 48)[50]

Along with the government response, this led to the appointment of a Director of Research and Development within the Department of Health and the development of the first NHS R&D Strategy[51]. Published in 1991, the strategy failed to mention the importance of underpinning knowledge for primary care (though it should be noted that the initial strategy did not aim to set priorities, merely the means for shaping these in the future) so that the discrepancy between wider policy and research to support new primary care arrangements seemed to be either ignored or dismissed. But, as noted above, the window of opportunity was gradually opening and the next few years witnessed the appointment of a new regional director from primary care who led a nationally funded research programme on the primary/secondary care interface, and the establishment of a National Primary Care Research and Development Centre set up and supported by the DH.

This was also a time when evidence-based healthcare had a firm grip on policy communities providing an increased sense of urgency to the need to address the evidence-base for primary care. By the time of the Culyer Report in 1994, interviewees reported that primary care research was pushing on an open door: the government could no longer afford *not* to address it. Development had been constrained for obvious reasons: for instance, the need to compete with other more established disciplines via new systems for research assessment; little (if any) academic career structure; and little interest from new funders for supporting primary care research. But, in terms of documented policy, the Culyer Report finally and formally recognised the need for primary care to access funding and infrastructure to support research:

> "We have a general concern that some NHS settings, in particular primary and community services, have fared less well in developing a research capacity and in securing support for it. It is time to place R&D in primary and community care settings on an equal footing with the acute sector." (2004: 11)

[50] The White Paper referred to is *Promoting Better Health: the Government's programme for improving primary health care,* cmnd 249, November 1987.
[51] Also known as the *Peckham Report* (see Box 6 on page 84). Readers might refer to Peckham's book (2000) and Black's article (1997) for a broad overview of the development of the strategy.

The report was framed in terms of hospital-based clinical medicine and aimed to provide a mechanism for separately compensating hospitals for research[52]. It indicated a range of NHS reforms and policies that were of particular concern in the development of R&D and that it sought to address. Given the framing, it is unsurprising that some of these (such as the shift from secondary to primary care or the development of GP fundholding) were *advantageous* to primary care.

a) Into utopia

A series of white papers in the mid-1990's, including two on primary care (Secretary of State for Health 1996; Secretary of State for Health for England 1996), appeared to draw further attention to the need to procure evidence to underpin primary care and the failure of the research budget to address this satisfactorily. *Primary Care: Delivering the Future* announced an increase in the available NHS R&D budget for primary care from £25m to £50m over five years. Shortly afterwards Professor David Mant – one of the NHS Regional R&D Directors and an academic GP by background - was appointed to chair a national working group dedicated to guiding the strategic development of primary care research and development. Their final report was published in 1997.

The DRDs foreword to the *Mant Report* (see Appendix 8 on page 354 for the full text) began by constructing primary care in the NHS as a "fact of life", indicating a powerful acceptance of primary care within government. It likened research in the field to a voyage of discovery where there are areas that are "under-explored" and where "opportunities are great". In doing so it denied the wealth of research undertaken previously and the struggle for recognition to-date, instead suggesting the discursive construction of primary care research within the report marked a beginning. The DH implicitly claimed responsibility for this by providing "encouragement" and ensuring "obstacles are removed." In doing so, the DH refused to accept responsibility for having previously failing to encourage and remove obstacles.

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[52] The background to the Culyer Report deserves more attention than I have room for here as it demonstrates the importance of the political economy as a driver for changes in research policy. Earlier conservative healthcare reforms had led to a situation where those purchasing care were unwilling or unable to pay the additional costs of clinical research. This came to a head when such arrangements threatened a high profile HIV trial funded by the Medical Research Council. The DRD raised this immediately with the Secretary of State for Health. The potential for political embarrassment was evident - particularly given the focus on HIV/AIDS at the time – and they agreed that a new mechanism was needed to separately compensate hospitals for doing clinical research. As an economist on the CRDC, Professor Culyer was then asked to chair an independent committee and develop a system for creating a funding stream that was dedicated to supporting clinical research. For a more in-depth description, see Michael Peckham's book - *A Model for Health* - describing events during his time as Director of Research and Development (Peckham 2000).

Since the mid-1990's there have been several texts produced which relate to primary care research[53]. It is impossible to cover all these in detail here. I have chosen to focus primarily on the *Mant Report* as this is a point of reference for policy documents, other government texts and interviewees[54]. I then draw on other reports throughout subsequent findings chapters to elucidate further in relation to specific discourses at play. The *Mant Report* represented an important moment in the history of primary care research: when those involved in policy not only recognised the area as needing to be addressed in some way, but also in identifying an individual from the field to explore strategic development and to recommend a means for NHS R&D to address it. Prior to this time, it was much more difficult for those involved in primary care research to employ their own research discourses within the formal policy setting. Hence the title of this section: for many it represented a small critical moment, a significant time of success, when the struggle for recognition was clearly made and when primary care research entered a utopian age of acceptance and growth.

Whilst recognising pitfalls, some interviewees at times came close to reification of the report. It appeared to capture a passion and belief suggesting something greater than the sum of its parts. But why was this? The data suggest that the timing of the *Mant Report* allowed it to bring together accumulated events and political struggle into a cohesive document and with the political and financial support of government. It also presented a particular (though contested) view of the world of primary care research and one that was presented as ahistorical. Perhaps this explains its enduring memory in that, like the foreword within it, the presentation of primary care research given creates the impression of having begun at the precise time of publication.

i) Presenting a legal challenge

The *Mant Report* pitched general practice and primary care research against the more established domain of clinical research undertaken in secondary care. Like so much that went before, it challenged the traditional discourse of clinical medicine[55]. To do this, the report was constructed using a strong legal discourse, where 'The Case' was made by the *prosecutor* – primary care research seeking to transform the landscape of research –

[53] See the overview of primary care research in Appendix 2 (page 296) and the chronology in Appendix 3 (page 331) for further detail.
[54] See earlier discussion that described the selection of this report (pages 80 to 81)
[55] Refer to earlier discussion relating to the emergence of general practice and primary care and the struggle for identity beyond the traditional boundaries of clinical medicine (pages 115 to 123).

against the *defendant* – hospital medicine, seeking to maintain its hold on research support and funds[56]. The judge *and* jury were the Department of Health.

A number of points were articulated to secure success of the prosecutors and attempt to withdraw funds from secondary care research. These drew on arguments already made elsewhere such as an emphasis on the number of patient contacts within primary care and the centrality of primary care to the NHS; the need for a firm evidence-base and for knowledge to be constructed within appropriate settings and across relevant professions; and appeal to the governments wider sensibilities by indicating the potential of primary care research for empowering patients and improving public health. The report also drew strongly on economic discourse, as one interviewee suggested when discussing the report:

> "There are major benefits to the health economy in the UK of making this investment, but to do that, sorry, *and* to do that you'll get much bigger returns for each buck you spend by putting it here than you will by putting more money into what you're doing already. So there's a potentially bigger gain." (Senior academic general practitioner, regional primary care)

Rhetorical devices were put to good use to further construct The Case: for instance Will Pickles and Julian Tudor Hart - key individuals in general practice based epidemiology - were invoked to support arguments for research in primary care contributing to the governments public health agenda. The language of evidence-based healthcare and its applicability to primary care was stressed, thereby speaking to wider government policy and programmes such as clinical governance. And economic arguments were put to good use, appealing to government bureaucracy by justifying an (already agreed) increased spend from £25 to £50 million. Although the report shied away from a direct mention of secondary care in this economic context, the implication was disinvestment and reallocation to support primary care research whilst suggesting the DH adopt a long-term view to assessing the impact of such investment. The DH agreed, providing increased funding over a five-year period.

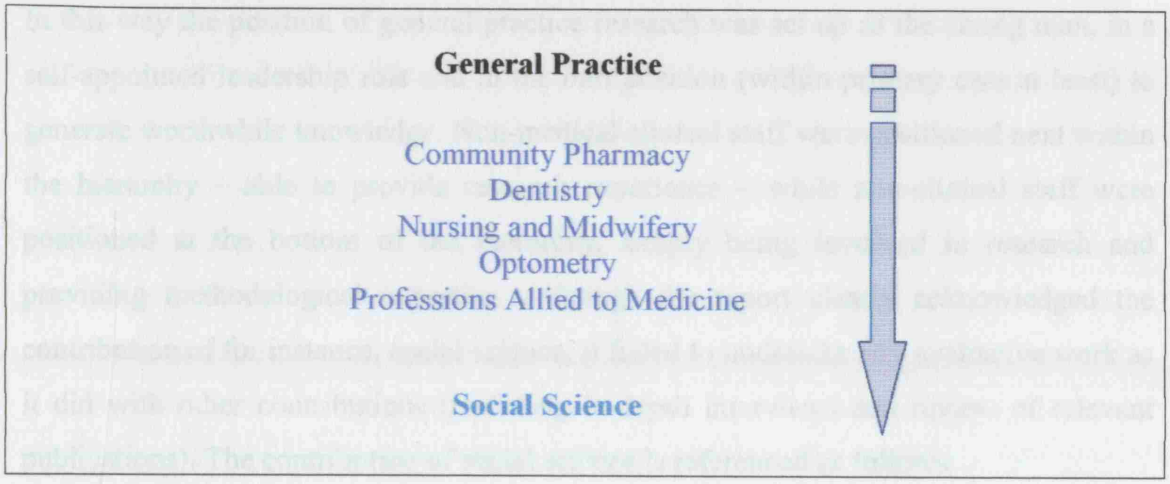
ii) Contested research ground

Figure 3 is drawn from text within the *Mant Report* and is presented here to demonstrate the way in which general practice and primary care were typically constructed across texts relating to research policy. Whereas the *Mant Report* conveyed a holistic,

[56] Chapter 2 of the report is even entitled "The case for supporting R&D in primary care".

multifaceted view of primary care, this was presented hierarchically and with general practice consistently placed at the top. This mirrors tensions between clinical generalism and the wider primary care system; and between the history of general practice research and the more recent development of other areas of primary care research. In an attempt to overcome this, the report made frequent use of the term 'we' to convey a sense of cohesion in primary care research: a united front able to develop The Case and prosecute accordingly. But this cohesion contrasted with hierarchically placed professional groups.

Figure 3: Representation of primary care drawn from the Mant Report



In order to present and discuss areas to be addressed by primary care and research the report adopted the hierarchy in Figure 3, taking general practice first followed by community pharmacy and so on, with social science last. The level of information provided followed a similar pattern: with relatively large amounts of information relating to general practice and gaps in information around social science. This heightens perceptions that the report was framed primarily in terms of general practice; but might be partly explained by the history available to general practice enabling greater accessibility to, and use of, such information. For instance, figures on numbers of GP principals or academic GPs were easily obtainable; figures on the number of statisticians or economists and their publications were not. However this has the ideological effect of allowing one group to tell their narrative about the past in order to justify the present, whilst preventing others from 'making history'.

Language was used within the *Mant Report* to emphasise some aspects of research in the area as more worthwhile than others. General practice was described as:

"...the best developed research discipline." (page 16)

Not the most well developed but the *best* developed. This is a subtle use of language that implies the most excellent, finest or unsurpassed; the top of the hierarchy. It implies that the model of general practice research is also the model that others should aspire to and negates the breadth of knowledge, methods and experiences across primary care, assessing these in relation to its own criteria (range of methodology used, links with other disciplines, scale of research, research funding and number of support staff employed).

In this way the position of general practice research was set up as the strong man, in a self-appointed leadership role and in the *best* position (within primary care at least) to generate worthwhile knowledge. Non-medical clinical staff were positioned next within the hierarchy – able to provide research experience – while non-clinical staff were positioned at the bottom of the hierarchy, simply being involved in research and providing methodological expertise. Although the report clearly acknowledged the contribution of for instance, social science, it failed to undertake any evaluative work as it did with other contributions (including in-depth interviews and review of relevant publications). The contribution of social science is referenced as follows:

> "There is a substantial body of research carried out by social scientists, much of which is of high quality." (page 7).

This suggested inherent difficulties in fully exploring the nature of primary care and thereby understanding and incorporating it within wider policy. This may well stem from the early development of health centres in the 1960s which allowed physical and occupational differentiation of work across teams working in general practice settings (Armstrong 1985). This emphasised the focus on general practice as a venue for work for disparate teams, without compensating for this differentiation with a renewed and integrated identity. This has, in turn, contributed to a view of general practice as the focus of clinical activity, as opposed to a branch of medicine.

iii) A period of growth

The *Mant Report* led to a tremendous optimism around primary care research with the government making a financial commitment to support growth for a period of 5 years. This was reinforced through wider developments, including publication of a Topic

Review dedicated to primary care by the Medical Research Council, as well as continued development of primary care services. The MRC *Topic Review Primary Care* (1997) was important in openly acknowledging the need, not only to identify specific research requirements related to primary care, but also to ensure that MRC strategy addressed such requirements. Publication in the same year as the *Mant Report* may well have helped to raise the profile of primary care research within relevant policy circles. However, given the above section relating to 'contested research ground', it is worth noting that the focus of the review was 'general practice-based primary healthcare' and was therefore necessarily confined within this self-imposed boundary.

The broad government commitment to primary care research following both reports resulted in a number of initiatives. Of note was a growth of primary care research networks and a national body – the UK Federation of Primary Care Research Networks - to ensure coordination and representation within policy circles; support through the National R&D Capacity Building Programme for the development of primary care-based academic career pathways; an overall growth in research undertaken in and on primary care and in activity relating to academic departments of general practice and primary care more broadly; and greater coordination across funding partners to address gaps in support for primary care research (for instance, via a joint DH/MRC call for bids)[57]. Interviewees reported an overall sense of optimism for future development during this period.

b) Changing social and political relations

The *Mant Report* was published at a time when the field of relations surrounding healthcare policy was shifting, not least with the election of New Labour in the same year, 1997. This began to position primary care and research differently as health and science policy were reshaped in line with the changing social and political emphases of government.

The main difficulty facing primary care research at that time was the need to respond to a massive programme of organisational change including the introduction of new primary care organisations - Primary Care Groups and Trusts - in 1999[58]. This was followed by shared organisational arrangements across groups of PCTs in relation to

[57] See Appendix 2 for further description of some of these initiatives.
[58] Other changes included closer alignment of primary care with public health; and the development of Strategic Health Authorities (refer to Appendix 2 for further detail).

teaching and research. Policy documents of the time advocated research activities within these new organisations (including both undertaking and managing research) (Bailey 2002; DH 2001c; 2002a). However, in reality these organisations tended to focus on research management and governance issues. Added to this, although £24 million was made available by the government to support the development of Teaching PCTs, no funds were made available for research within the same stream[59]. This came in the form of PCT Research Management and Governance sites that received limited funds and even the DH appointed name suggested an emphasis on management-related issues[60].

Such moves were part of wider government plans for modernisation of the NHS that reflected changing healthcare environments, public-private relations, increased government funding to support health and healthcare, and an emphasis on quality improvement and performance measurement to encourage and monitor change. This embodied a realignment of discourses, made evident in new institutional forms such as the National Institute for Clinical Excellence[61].

Primary care research continued to be recognised as part of the research policy agenda. For instance, a review of the NHS R&D Strategy was undertaken in 1999 with primary care identified as a topic specific group, unthinkable only a decade beforehand. However little seemed to happen as a result:

> "Well the other thing, the other report that I was going to mention was that, what was it called, Clarke Review...(which followed the Mant Review) that went absolutely nowhere. And we were going to Cumberland Lodge for a residential and we had a big session about research priorities...and goodness knows what. It never saw the light of day." (Senior academic general practitioner, SAPC representative)

Reinforcing this, I was unable to identify documents that took this agenda forward in any meaningful way. When *Research and Development for a First Class Service* was subsequently published in 2000, it set out a number of policy statements and principles including the use of expert advice to feed into the identification of priorities and needs for NHS research. This development of expert groups was to be based on three of the topic working groups that had been established for the earlier strategic review:

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[59] Though there was a suggestion that funds might be available at a later date.
[60] See Appendix 2 for further information about the development of these sites.
[61] See page 313 for a description.

> "Three NHS R&D advisory groups will be formed in 2000 to advise on cancer, heart disease and stroke, and mental health. These groups will build on the recent Strategic Review of NHS R&D Funding and in particular the work of the review Topic Working Groups. They will take due account of the needs of the elderly and children and the commitment to primary care R&D." (page 19)

Primary care was no longer directly included and was seemingly reduced in importance in terms of its contribution to policy development. Instead it was to be considered by other clinical groups with no recognition that this might not allow for the on-going narrative of primary care research to have a policy voice of its own and that incorporation within areas might skew or even exclude this narrative entirely.

Research and Development for a First Class Service (DH, 2000b) brought together discourses of modernisation, science, innovation and technology in new ways and imported this into the research agenda[62]. In this sense it signalled a significant shift from previous policy discourse and a major swing in the way research was conceptualised by government and within policy. It led to a direct challenge to the utopian ideal of primary care research that no longer appeared to align with dominant discourses that emphasised a greater concern to develop clinical research in line with economic, scientific and global concerns. Support for policy relating to primary care research was reconstructed in line with these dominant discourses (refer to subsequent chapter).

c) Out of utopia

This shift in social and political relations was accompanied by a general downgrading of the power of NHS R&D[63] and a loss of support mechanisms closest to primary care research such as training funds, responsive funding[64] and NHS Executive Regional Offices. These regional structures characterised the utopian ideal as, although interviewees indicated they were variable in their support of primary care research, they signified a focus on the multidisciplinarity of primary care and local support structures:

> "The local knowledge, the R&D community in each region knew each other well, we had regular meetings with each other, we discussed strategies with them, they felt a part of it, they felt that they knew who to come to if they

[62] See the section below on 'what is science?' and the subsequent chapter for a more in-depth description of these discourses and their impact on primary care research, focusing on science and economy in particular.

[63] One academic GP described this downgrading of the power of NHS R&D as symbolised by the loss of the seat on the NHS Board by the immediate past Director of R&D.

[64] Interviewees reported that this provided a valuable source of seed funding for primary care researchers.

had a problem or an issue. That was a big loss in my view." (Senior DH policymaker, research capacity building)

This DH representative characterises research in broad community terms as opposed to professional or disciplinary areas. This loss of the regions provided greater impetus for central control and administration, facilitating a move from separate areas and regional idiosyncrasies to a centralised structure and programme able to respond to major government policy:

> "...at times it's felt that R&D has ground on redesigning and reinventing itself all the time, without really any huge response to the bigger government issues, until this last two or three years, where it has actually begun to respond to the bigger issues, you know, John Pattison's[65] move into the *Research for Patient Benefit Working Party* and the creation of a UKCRC I think is R&D now beginning to respond to bigger government issues." (Senior DH policymaker, research capacity building)

This is a crucial point representing a loss of the research community characterised above and also the greater influence of the discourse of government bureaucracy (see chapter 10). This is an era when the research policy process became more closely associated with centralised and managed government[66]. This was characterised by ministerial decisions and rapid enactment[67]; an emphasis on centralised R&D structures (see Box 10) and clearer links between research and government. One interviewee, now retired, reflected on the difficulties this might raise:

> "I couldn't deal with the bureaucratic politics, I really couldn't. I would have got really angry with the kind of notions that are now meant to be taken as given, as to for example what counts as worthwhile in the university for example. The sort of people I would be allowed and would not be allowed to promote would be a very good example. And so on." (Senior academic general practitioner, retired)

From this academic and historical perspective, not only has the discourse of government bureaucracy come to be dominant, but this has also exerted greater control over what is considered acceptable or good in the research world. This stood in contrast to this and other interviewees' discourses on past era's where research was regarded as a subversive and politically charged activity as opposed to a systematised, centralised and managed bureaucratic endeavour.

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[65] John Pattison was DH Director of Research and Development at the time.

[66] For example, one Academic GP pointed out that the regional money was lost due to a Treasury decision to reduce NHS R&D funding.

[67] For instance, one senior DH representative reported that the senior executive were told to enact ministerial decisions resulting in the demise of the regional offices and the DHSCs with hardly any lead time between the decision itself and the enactment of it, resulting in no official documentary trial.

Box 10: Developing a UK Clinical Research Collaborative

The government established the **Research for Patient Benefit Working Party** as a response to reports from the Biosciences Innovation and Growth Team and Academy of Medical Sciences. The interim report of the working party (released in time for the 2004 Budget) and the final report in May 2004 made recommendations for action at ministerial level, including the establishment of a **UK Clinical Research Collaboration,** formally announced by the Secretary of State for Health.

The UKCRC was set up in October 2004 with a vision: "to adopt as its long term goal establishing the NHS as the world leader in contributions to clinical research." (DH, 2004b: 1). UKCRC is made up of a number of partner organisations including government departments and agencies, industry representatives, and voluntary and charitable organisations. It has five major work streams:

1. **building up the infrastructure supporting clinical research,** including a UK Clinical Research Network and comprising of a set of managed research networks.
2. **building up the research workforce,** including the development and funding of an integrated training pathway for Academic Clinicians with subsequent work to develop clinical research career structures for nurses and allied healthcare professionals.
3. **building incentives for research in the NHS**, including individual incentives for clinicians and Trust Chief Executives and institutional incentives such as transparent allocation of R&D funding.
4. **streamlining regulatory and governance processes**
5. **coordination of research funding** to identify gaps and opportunities and ensure a more joined up approach.

Initially the **UK Clinical Research Network** consisted of a central Coordinating Centre for clinical research and a managed set of six topic specific networks covering mental health, medicines for children, dementias and neurodegenerative diseases, stroke and diabetes. This was purposefully disease-oriented and it was envisaged that over time this infrastructure would enable research to be conducted across the full spectrum of disease and clinical need. Primary care was not included within original proposals however, there was subsequent discussion as to how existing models of primary care would need to change in line with this new infrastructure and, at the time of writing, it was envisaged that eight Local Research Networks (focused on primary care) would be formed from October 2006.

Most recently, the DH sought to revise NHS R&D strategy, releasing a consultation document – **Best Research for Best Health** – emphasising continued development of the clinical research infrastructure and associated networks, development of the NHS as a preferred host for multi-centre clinical research and broader health research, and changes in funding arrangements. Primary care was included within this report (and in the subsequent full government strategy published in 2006) though specific proposals, such as the formation of Academic Medical Centres, appeared restrictive in focusing on research hospitals.

Interview texts from a senior DH policymaker and an academic GP used metaphors of trauma, insecurity and vulnerability to describe the impact of these changes on primary care research:

> "I'd just watched the Scott film on television where they were camped on Antarctica and the ice broke up half way through their camp and they didn't know, you know, it just felt like that, you were just standing on the ice and it was all breaking up, there was not a solid piece of ground anywhere hardly that you could put a foot on because everything was changing." (Senior DH policymaker, research capacity building)

This was a significant metaphor in considering the vulnerability of primary care research, based in an encampment that was not permanent, not always sure where they were heading next and subject to unpredictable and cataclysmic events that were perceived as resulting in a loss of familiarity, a need to cope with on-going uncertainty and yield to powerful and unpredictable external forces.

On page 114, I drew attention to the metaphor of the family, used by interviewees to highlight the adolescent qualities of primary care research as a reasonably new area. This metaphor carries notions of naivety and inexperience; about primary care research as an emergent and growing area, reliant on informal 'kinship' as opposed to formal bureaucratic relationships; needing to find its own identity and break free of its 'parent'. These adolescent qualities made primary care research particularly vulnerable to structural change:

> *Sara*: "And why, what is it about primary care that makes it so vulnerable?"
> *GP Academic*: "Partly I think, the fact that it comes to the party still very recently. I mean...its not even 10 years. We've only had a decade that primary care has been showing up on the radar for NHS R&D funding, so you know, we haven't had time to consolidate that." (Senior academic general practitioner, capacity building)

It was evident from the data that primary care research had its own set of difficulties as a result of this vulnerability and lack of time to consolidate. Despite this, it still had to respond to external structural changes and it seemed there was little control of this from within. In fact there was a sense of unpredictability here: the sense of constantly shifting ground was suggestive of primary care being at the mercy of unpredictable, central policy decisions. Although new structures meant that research was broadly able to respond to such changes, it is important to bear in mind that these were driven by dominant discourses and institutions to which primary care had limited access[68].

[68] As explained on pages 164 to 174, primary care research is not considered scientifically, economically or globally competitive.

7.4 What is science?

The emergence of research policy has its roots in government intervention in science. The story of government policy relating to science and the funding of identified scientific priorities (by whatever means) has come about through a series of different answers to the question 'what is science for?' (Wilkie 1991). In seeking answers, science has been reinvented via the conspicuous use of different conceptualisations, descriptions and delimitations. At varying times it has been regarded as a modernisation activity; a means for conceptualising technological development and leading to application of practical and mechanical sciences; and associated with broad public benefit and quality of life, military power, environmental awareness (or lack of it), industrial growth, knowledge production and competitive economic advantage. One framework of understanding that has continually contributed to understanding includes the separation of basic and applied research. To understand this separation, I revert to historical analysis to uncover the foundations of the relationship between science and government.

a) Science and government

The Medical Research Council was established in 1913[69]. It was set up under the 1911 National Health Insurance Act which stipulated that for everyone insured under the scheme the Treasury would make available one extra penny for medical research from public funds[70].

According to the radical epidemiologist of the 1950s and 60s, Archie Cochrane, back in the nineteenth century and for reasons that were somewhat obscure:

> "British science divided itself into basic and applied, and decided that pure research was 'U' and applied research 'non-U'...I remember being advised by the most distinguished people that the best research should be utterly useless." (Cochrane, 1972:9)

Guided by political values, the MRC deliberated over the focus of its work and elected to follow a similar 'divided' path. It adopted a long-term policy supporting medical research as opportunity arose, as opposed to concentrating on specific short-term policy goals. This established a delineation between basic and applied research – or

[69] Known until 1920 as the Medical Research Committee.

[70] I have not been able to establish exactly how or why the Treasury took this step but Wilkie reports that this first commitment of public funds amounted to £40,000.

understanding and use - that has characterised research policy ever since[71]. Even changes in research policy in the 1970's that attempted to more closely match the needs of policymakers and the science budget (see 'Science and modernisation' section on page 142) did not alter this. In relation to healthcare this focus on basic research was also associated with activity in hospitals and those professionally trained within the domain of clinical medicine (i.e. physicians and surgeons). It also became associated with a certain snobbishness in health research (Cochrane 1972) whereby securing MRC funding, largely associated with pure or basic research, came to be highly regarded by comparison to that from NHS R&D which typically supported applied research[72].

i) The Haldane Principle

The *Haldane Report* on the machinery of government marked a watershed in national support for science (Lord Haldane 1918). Fuelled by World War I and the implication that science played a significant role in the German side, among other things the report proposed the establishment of Research Councils. It adopted the MRC approach, distinguishing activities of the MRC (referred to as "Research for General Use" and designed for the advancement of knowledge) from those of individual government departments (referred to as "Research Work Supervised by Administrative Departments")[73]. The report established what has come to be known as the Haldane Principle advocating that research for the advancement of knowledge be independent of government departments and individual ministers or senior civil servants within them that might be concerned with findings[74]; and that operational research should be the ordinary practice and responsibility of such departments.

Basic research came to be associated primarily with knowledge development. Applied research came to be associated with the pursuit of strategic or problem-oriented goals. This distinction represents the foundation of scientific research. Classified as separate practices, both types of research have been influenced by different fields of relations, been explicitly associated with different institutional forms and undertaken by often quite separate groups.

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[71] See Chapter 2 in Stokes (1997) book for a more in-depth history of the system of ideas that emerged around science and technology and the institutional separation of basic and applied research in Europe.

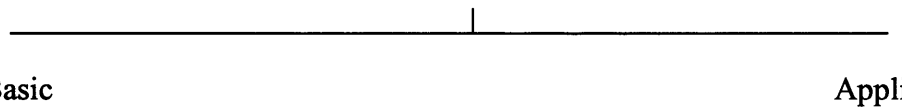
[72] Cochrane referred to a story that circulated that he considered summed up this snobbishness, that 'the MRC investigated God-made diseases while others could investigate man-made diseases'.

[73] Cited in Wilkie (1991).

[74] With responsibility for the MRC falling to the minister without portfolio who could represent science at Cabinet level.

Although the basis for any attempted taxonomy of research necessarily shifts according to social and political transformations, the separation of basic and applied research embodied in the early research of the MRC and the Haldane Report has remained entrenched. Along with the creation of the University Grants Committee in 1919 and the early establishment of the dual support system, this allowed basic research in particular to thrive, with little consideration as to whether institutions that have served basic science were appropriate to the conduct of applied research. It also failed to consider if and how science could feed into social as well as commercial benefits[75]. This led to the construction within policy of a one-dimensional, dichotomous approach to research with basic and applied research at opposite ends of a linear spectrum, represented in Figure 4.

Figure 4: The one-dimensional approach to research within policy[76]



This conceptualisation produced a tension within research policy and practice, suggesting that by doing one, you are always moving further away from the other:

> "Inherent conflict between the goals of basic and applied research is thought to preserve an empirical boundary between the two kinds of inquiry. The separateness of basic and applied research implied by this presumed conflict is an idea that's woven into the dominant paradigm of science and technology policy and perceptions of science held by government, the research community and the wider communications media." (Stokes, 1997:9)

Stokes goes on to draw on a range of scientific research that can be regarded as both basic and applied[77]. In doing so he problematises the dichotomy of research typically conceptualised within the policy texts studied. He argues that research can also be seen as an organic whole with compatibility between undertaking both applied and basic research, which challenges traditional discursive constructions of research within

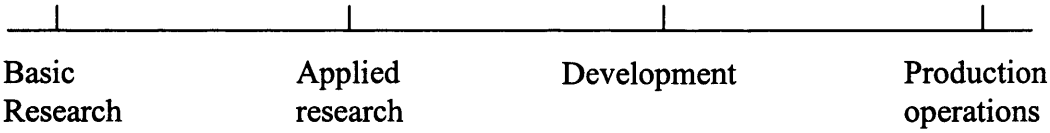
[75] Drawing on Wilkie (1991).
[76] Adapted from Stokes (1997).
[77] Such as the rise of microbiology and the work of Pasteur. See Stokes (1997) pps 12-3 for a useful summary and in particular Chapter 3 (pps 58-89) for a fascinating description of Stoke's conceptualisation of research in what he refers to as Pasteur's Quadrant (the title of his book).

policy. This is particularly relevant to primary care research that spans the supposed dichotomy of basic-applied research and might feasibly involve seeking new knowledge and, conjointly, its application within healthcare settings.

ii) Public and private domains

This one-dimensional model of basic-applied research continued to reaffirm the belief that scientific advances are converted to practical use by a dynamic flow from science to technological development (see Figure 5). It drew on a linear approach to (science/research) policy based on a framework of rational thinking to construct a view of the world as scientifically objective. The process has come to be known variably as 'technology transfer' or the 'development pipeline' with technology-push at one end and market-pull at the other. But it ignores the complex interrelationships between decisions, structures, processes and the role of power and conflict in transforming research and policy[78].

Figure 5: The process of technology transfer[79]



Despite its flaws, this has come to form the basis for much of research policy (for instance it is similar to the model of evidence-based policy that is widely advocated as facilitating a linear route between knowledge production and translation into practice[80]). Successive governments have been influenced by social and political relations to seek a means of striking a balance between problem-orientation and science-driven research. This in turn has affected the balance of funding and support for research and development from different sources (such as government (via the NHS), Research Councils, medical charities and the commercial sector) and ideological shifts in the emphasis placed on public and private support and responsibilities. I return to this in the subsequent chapter.

[78] For instance, using the longitudinal case study of the development, testing and adoption of innovations around HIV/AIDS, Maguire develops a political model for technological development and transfer (or adoption of innovations); shows how a different mix of actors involved in decision making can lead to different adoption patterns; and thereby challenges traditional notions of rational information informing objective and uncontested models that are simply enacted by passive and homogenous actors (Maguire, 2002).

[79] Adapted from Stokes (1997).

[80] See pages 27 to 29 for further detail.

b) Science and modernisation

Military and technological research came to dominate the scientific endeavour between the first and second world wars. World War II in particular prompted greater support for science generally via national initiatives such as the Manhattan Project[81] and was fuelled by post-war competition in the space race and the cold war. This was a period marked by a particular type of science: what has commonly become known as 'big science', involving massive investment in large-scale projects that were regarded as revolutionising industrial development and growth and where the threshold of expenditure needed to achieve worthwhile results tended to rise exponentially as was the case in nuclear physics and radio-astronomy (Lord Privy Seal 1971). The 1960s was therefore regarded as a period when science and technology would, through modernisation, transform the problems of slow economic growth. However, far from being realised, the 1970s brought disillusion with science and further economic decline, aided by the global oil crisis.

In the climate of economic recession in the 1970s and subsequent science cuts by the Thatcher government, opportunities for more creative science policy were missed. Those concerned fell back on established categories and concepts to spell out their detailed polices for support of research by government. There followed renewed emphasis on the separation between basic and applied research, reaffirmed by Lord Rothschild's dicta in the early 1970s based on the customer/contractor principle[82]. Although relevant to the work of the Ministry of Defence, Rothschild's customer/contractor principle was not necessarily apt to the less tangible and more conceptually complex aspects of health research. Indeed, Rothschild failed to draw on any examples from health-related research to illustrate his hypothesis, but focused particularly on defence and environment:

> "The customer (client, user or representative) may be direct, for example the Vice-Chief of the Naval Staff who require a new or improved torpedo; or indirect, in that he represents, sometimes in a oblique way, the user of the

[81] The focus of the applied development of atomic technology and leading to the production of the first atomic bomb.

[82] The principle was based on separation of purchaser and provider and suggested that, whereas applied research required a customer/contractor arrangement, any similar arrangement for basic research would be inappropriate (see page 199 for further detail). Though hostile to Rothschild's proposals, the MRC was also hostage to the same ideological separation and argued its case in terms of the value of fundamental science. Stokes (1997) argues that this is due to the lack of any conceptual language transcending the basic-applied vocabulary.

> product, process or method of operation which constitutes the end product of an applied research and development programme. An example is road research and development sponsored by the Department of the Environment on behalf of the motorist (at any rate in part)." (Lord Privy Seal, 1971: 4).

The basic-applied separation was reinforced by the conservative government of 1979 with its increased focus on the role of the marketplace that had no place for basic science due to a lack of immediate application. But this was overtaken by an increasing acceptance of the economic argument that pure research should be funded by government as a public good (that's unlikely to find other support) whereas research and development activities that are nearer to the market should be funded by the private sector (when applying a market test). This was reinforced initially in the 1993 conservative White Paper *Realising Our Potential* that marked a realignment of discourses through a reassessment of the interrelationship between science, knowledge and economy; and subsequently via the policy initiatives following election of New Labour in 1997.

i) Science, government and health

Although the establishment of the NHS facilitated increased emphasis within government on medical work, it was not until the 1980s that policy relating to science and research began to address this as a separate area for attention[83]. The Nuffield Trust, an advocate for applied health services research, provided an important role in assessing and evaluating health-related government policy, pointing to deficiencies within the system, as well as the need for investment. For instance, it drew attention to the pitifully low amount devoted to the health services sector recorded in Cabinet Office Annual Reviews of Government Funded R&D (1983 and 1984, cited in McLachlan G 1985).

Post-Rothschild there was a strengthening realisation that not all areas of science can be treated in the same way. This was fuelled by debate surrounding the report itself and problems with the customer/contractor principle that had subsequently been implemented by the labour government of the time. Texts such as Cochrane's *Effectiveness and Efficiency* (1972) drew attention to the need to review health in

[83] This is not to suggest that research in health was not supported, but that this tended to be either through the MRC or on an ad hoc basic via various government 'customers'. For instance, a number of government and public authority establishments were undertaking DHSS research (such as the Public Health Laboratory Service) and a range of academic groups and designated research units were supported on programme-based contracts (such as the Health Services Research Unit at the University of Kent). Readers are directed to Nuffield Trust's *Portfolio for Health* series which provides a useful summary of programmes. The dual support system also provided support for health-related research and a number of keen individuals in general practice and primary care continued to undertake self-supported research.

different terms and consider different knowledge requirements across government[84]. This was facilitated by economic change based on early ideas of a knowledge economy; increased integration of research and the market (as well as partnerships between public and private and universities and industry); and debate over evidence-informed policy, use of applied research and the role of customers. But it was not until 1998 that the House of Lords Select Committee on Science and Technology felt able to address medical research – and NHS research in particular - as an area for policy analysis

> "...there was some anxiety about the status of medical research in the UK. Actually, interestingly enough I don't think the review started with anything like the NHS in mind, it was much more medical and clinical research, but in doing this Review they highlighted the fact that the medical research was on one track and the health service and health care was on another track and the communications between them were actually rather limited, so the idea was to try and create a situation where there was a *real* linkage between healthcare and medical research." (Senior academic, senior DH policymaker and strategist)

The report prompted the development of the first NHS R&D Strategy. The system proposed by the Select Committee report included a return to the Haldane principle, pointing to the value of an independent research department located within government but organisationally and physically separate from the DHSS. This was subsequently rejected by the government in favour of appointment of the DRD to the Department of Health and as a member of the NHS Management Executive (Department of Health 1989). Although this represented a formal means of bringing together disciplines and professionals the focus remained medical:

> "So the kind of R&D policy in relation to trying to straddle health and medicine is, I think, a very interesting challenge, and although superficially one might say the health sector is richly underpinned by research, what one really means by that is that *medicine* is richly underpinned by research...and actually health systems are not richly underpinned by research. So it's quite interesting to draw that distinction." (Senior academic, senior DH policymaker and strategist)

c) The language of science and research

The one-dimensional construction of research (see Figure 4, page 140) has persisted into the twenty-first century. Successive governments have sought to variously describe, define or delimit different fields of research. This indicates the centrality of semantic

[84] It is worth noting that Cochrane was only really venerated after his death in 1988. It was at this time that his insistence that randomised clinical trials were an important means of guiding decision making became widely taken up and the Cochrane Collaboration subsequently established.

discussions about what research is[85]. But this has remained largely ignored within policy texts. Lord Rothschild even argued to divorce research from social and political activity in order to rationalise this process (Lord Privy Seal 1971), although by page three of his report he was unavoidably drawn into this debate, seemingly without realising.

i) Defining and reproducing language

The basic-applied dichotomy has been reinforced through development of subsequent definitions. Developed and published by the OECD (1994), the *Frascati Manual*[86] essentially reproduced the same conceptualisations. There followed over thirty years of effort from OECD countries to modify reporting categories within the manual and resolve the sorts of tensions I have already referred to. The manual has since been adopted across OECD countries with the knock-on effect that wider initiatives have followed suit and this conceptualisation has become woven into the fabric of policy and politics. For instance, the Cabinet Office Annual Review of Government Funded R&D adopted the *Frascati Manual* definition of research from 1980.

It appears that science policy is trapped by the dichotomous conceptualisation of basic and applied research, with little (if any) indication of a desire for radical change[87]. And why should there be? Most research/ers adhere to the traditional conceptions that favour certain forms of science and groups of scientists.

ii) Constructing medical research

Priorities in Medical Research (House of Lords Select Committee on Science and Technology 1988) was a rarity in that it elected to reflect on the terms it used. It explicitly rejected previous definitions used in exploring civil research which it argued were not wholly appropriate to medical research. It put forward four categories: basic, clinical, public health and operational research. Surprisingly it also placed considerable emphasis on operational (or applied) research that went against prevailing political

[85] The nature of research and the difficulties inherent in defining its nature is addressed in Shaw et al. (2005), which highlights the contingency of research, the range of activity and processes that might be considered as research and the way in which corresponding regulation has been shaped.

[86] So called because the 1963 conference that agreed that first manual was held in the Italian town of Frascati (Wilkie, 1991).

[87] Indeed, the Frascati definition has been perpetuated through the largely implicit use of the same language and overall conceptualisations. Of the texts studied, few explicitly reference the definition but many made use of the dichotomous language of basic and applied research suggesting acceptance and normalisation.

winds of the time. This suggested a wider recognition of the contribution of health services research that had a relatively new identity by comparison to other areas of research and similarities with primary care research in being 'host to many disciplines' (McLachlan, 1985).

More recently – and focusing now on health-related research - the proposed new infrastructure for clinical research[88] has done little to address this. The language of research has changed to include translational and experimental research and a greater emphasis on methods as a means of conceptualising research practices. This was essentially based on the same basic-applied dichotomy, with this particular report drawing attention to the need for expansion of large-scale clinical trials and epidemiological / public health research and a greater focus on the translation and application of findings into practice. Primary care has been somewhat marginalised in these recent government proposals and, as I illustrate in the subsequent chapter, was repositioned as a strategic resource facilitating, for instance, the recruitment of patients to clinical trials. This supports earlier discussion regarding the shifting field of relations in the late 1990's that facilitated a move 'out of utopia'.

iii) An example of the language used to position general practice and primary care

It appears that general practice and primary care have (implicitly or explicitly) sought to use language as a means of emphasising their own institutional legitimacy. One means of achieving this has been to position, initially general practice and later primary care, in terms of the level of care provided in community settings. Box 11 draws together a number of examples from 1953 to 1999 to show how this use of language has shifted or transformed over time.

The first two examples from the 1950's attempt to construct general practice as invaluable due to its historical narrative: the oldest branch of medicine. This is supplemented by quantitative estimates to emphasise the extent of care provided and an emphasis on the location of care within the community. With reference to earlier discussion on the development of general practice, this use of language appears to reflect the social and political relations of the time: having finally established its own professional organisation, general practice was seeking to develop and validate its own

[88] Set out by the Department of Health in *Research for Patient Benefit* (2004b) and the consultation document *Best Research, Best Health* (2005a) (see Box 10).

identity that was clearly delineated from hospital-based medicine. In an attempt to resist the power of clinical medicine, general practice drew attention to its own history and positions itself clearly within the domain of clinical medicine, indicating a legitimate position as a major care provider. By referring to the location of formal research within the hospital at that time, and contrasting this with the episodes of care in the community, the first issue of the Journal of the College of Practitioners also hinted at the need for a knowledge base within this context (an argument that is more strongly portrayed within the texts studied from the 1990s onwards).

Box 11: Positioning general practice and primary care[89]

1) Steering Committee report signed on foundation of the College (1953)
"General practice is the oldest branch of medicine. Over 80 per cent of this country's illness is cared for by family doctors…" (cited in College of General Practitioners First Annual Report)

2) First issue of the Journal of the College of General Practitioners (1958)
"It must be remembered that about eighty per cent of all the episodes of illness which appear in the doctor's consulting room or the home also end there, and never reach any hospital or institution where formal research is conducted." (page 23)

3) Primary Care: Delivering the Future (1996)
"Primary care is fundamental to the National Health Service. It is most people's main point of contact with the service. High quality and strong primary care services are essential to delivering effective and efficient health care." (page 3)

4) Mant Report (1997)
"Primary care is central to the NHS and to individual patient care. Over 90% of contacts between the population and the NHS take place in primary care." (page 1)

5) Medical Research Council Topic Review: Primary Care (1997)
"At present a little over 70% of the population consults a general practitioner ever year in the UK…" (page 40)

6) NHS R&D Strategic Review Primary Care (1999)
"Primary care is central to the NHS – 86% of all health problems managed in the NHS are managed entirely within primary care. However, much primary care clinical activity, including the way care is organised, is unsupported by any substantial body of evidence." (page 1)

In the examples from the mid- to late-1990's there is a shift. The emphasis is now largely on primary care reflecting the policy emphasis of the time on a primary care-led NHS, (discussed earlier: see for instance page 123 to 132). This was accompanied by a shift in language from general practice contacts to discussing the percentage of patient

[89] This is not meant as an exhaustive list of all uses of such language but as a spread of examples from the texts studied.

contacts that occur in primary care. This appears to have been brought more formally into policy circles via the *Mant Report.*

The use of what are essentially rhetorical devices has continued to be used in an attempt to position general practice in particular ways. As I will describe in Chapter 10, the current period is characterised by the science of probability and statistics that allows government/s to gain some control over social and political change (Foucault 1986; Lupton 1999). It appears that activity associated with primary care is consistently presented in such scientific terms so as to appeal to dominant policy discourse/s associated with clinical medicine and government bureaucracy. What is unclear is how and where such quantitative estimates have emerged: no reference is ever provided in any of the reports studied. However, over the years and despite changes in the quantitative estimates used, this type of positioning has been frequently used. To the point that a certain momentum has been gained and such estimates are presented as 'fact'. This is reflected in discussion with one academic general practitioner regarding recognition of primary care research:

> "...the old fact that 86% of the population are dealt with entirely in primary care just started to sink in....this is a fact." (Senior academic general practitioner, high profile policy input)

Like many of the documents cited above, he went onto argue that if such a high percentage of healthcare business is conducted within this setting then it makes no sense that there is no research base in the context of which people are doing all that work. But this is the view of general practice and primary care. I did not find any such use of figures within wider health or related research policy documents. Even the example provided in Box 11 from the 1996 White Paper shied away from specifics and falls back on a broad description of primary care as the main point of contact. And when the strategic review of NHS R&D took place in 1999, only the *Topic Working Group on Primary Care* (chaired by Professor Mant) drew attention to quantitative estimates (see Box 11) whilst the main report did not. Similarly, the *Culyer Report* did not use quantitative estimates but simply emphasised a shift in healthcare provision as justification for reallocation of NHS R&D funds:

> "Many respondents noted that the shift in emphasis from secondary to primary care ought to be underpinned by a parallel shift in the focus and location of R&D." (2.48, p26).

Indeed, one DH representative drew on marketing discourse to refer to this as a 'pitch' on behalf of primary care to the research budget. He continued:

> "It's a slightly flawed analysis, but it's a good ice breaking construct!" (Senior DH policymaker, strategist)

This raises the question as to whether those working within primary care and those within the confines of government bureaucracy share language and are able to communicate effectively?

7.5 Summary

This chapter has presented findings related to the emergence of primary care research and how this fits with discourses of science and government more generally. To elucidate, I have explored the historical development of general practice and primary care drawing on familial metaphors to set this in the context of the discourse of clinical medicine; the early development of research and the struggle to define and build a knowledge base for primary care; the employment of legal and economic discourses to challenge dominant research infrastructure; the changing relationship between government and science; and shifting conceptualisations of research; as well as describing the changing social and political field of relations that has shaped such developments. The focus on the emergence of primary care research and science policy has provided an important introduction to discourses and relations that have shaped current health-related research policy, such as clinical medicine; modern discourses of science; technology transfer; and economic discourses. Subsequent chapters present a more in-depth exploration of such discourses.

8

MODERN WORLDS OF SCIENCE AND ECONOMY

8.1 Introduction

In this chapter I build on earlier historical analyses and provide a broader picture of scientific and economic discourses whilst exploring how primary care research fits with this. Science and economy are largely the preserve of central government and are sustained through complex interrelationships of discursive constructions relating to globalisation, competition, innovation, technology, government bureaucracy, corporatism, knowledge, medical and clinical work and consumerism, which I will come on to discuss throughout this and subsequent chapters. This centralist agenda – characterised by a top down approach to government administration and new managed R&D structures explored in chapter 10 - frames what is possible in policy terms across government and society and has therefore helped to shape what is accepted as worthwhile in research policy. I focus particularly on recent research policy here but draw on wider discursive activity to make sense of this.

8.2 Transforming science and government

The nature of research, its purpose, relationship to wider society (locally, nationally and globally) and attempts to define it underwent a fundamental shift from the 1970s onwards. A global technological revolution emerged from changes in, and the availability of, new technologies in the 1970's[90], consolidating in the 1980's and beginning to characterise and condition national economies from the mid-1990's onwards (Cassells 1996). Successive conservative governments of the 1980's and early 1990's – although explicitly advocating the use of science and technology and a scientific approach to knowledge and government - arguably did little to support

[90] Post-Second World War economic growth and prosperity encountered its inherent limitations in the early 1970's at the time of the oil crisis, resulting in a period of restructuring where technological innovation and organisational change were critical elements.

development on a grand scale with the economic problems of the 1980's bringing cuts in Government science budgets[91]. But by the late 1980's the Government began to favour support of strategic science, forming the Office of Science and Technology in 1992, the dedicated body responsible for the science budget[92] and for coordinating science policies across all government departments. UK science policy then began to be conceived in a broader framework of policy that sought to exploit new ideas and knowledge, encapsulated in the White Paper *Realising Our Potential* (1993). The focus was on partnerships between industry, government and the science base and how these could be nurtured to improve wealth creation and quality of life (thereby capturing the ethos of the earlier *Peckham Report* seeking to balance improvements in health with increasing wealth).

There was a distinctive change towards the end of the 20th century and early in the 21st century influenced not only by the modern capitalist economy, but also social, technical and political developments in the field of science and technology. A particular *scientific* discourse came to dominate national policy based not on the industrial technology associated with large-scale production, but on microscopic 'discovery' and the effective development and exploitation of information. This was powerfully integrated with an *economic* discourse characteristic of modern capitalist states that placed increased importance on consumption (as opposed to production).

Realising Our Potential led to an overhaul of government support for science and technology including the creation of the Council for Science and Technology[93] and, with effect from 1996, the significant relocation of the Office of Science and Technology from the Cabinet Office to become an integral part of the Department of Trade and Industry. This reinforced the role of the Secretary of State for Trade and Industry as Cabinet Minister responsible for Science and Technology[94] and positioned scientific and economic policy discourse/s as mutually supporting. This was significant as it represented:

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[91] Indeed, they failed to recognise the importance of investing in and sustaining the science base with total government expenditure for Science, Engineering and Technology and R&D on a downward trend throughout the late 1980s and most of the 1990's (see Stoneman, 1999). The reversal of this has occurred recently with Labour Government reviews of research and science spending leading to increased long-term investment.

[92] Comprising three areas: a large higher education budget, monies allocated to the eight Research Councils and that spent by the OST.

[93] Created in 1993 to advise on science and technology issues central to the success of the UK and replacing the Advisory Council on Science and Technology (COST).

[94] Responsible for the government's science policy and for supporting science and technology generally.

> "...a statement of subservience of science and technology to the demands of wealth creation." (Stoneman, 1999:243)

The importance of this shift was embodied in the subsequent re-definition of R&D to Science Engineering and Technology. It was unclear how far this shaped subsequent thinking around research policy, but it was symbolic in indicating the power of the DTI in reframing conceptions of R&D in line with the dominant science and economic discourses. Research was now firmly aligned with science and trade, but also technology, which had already been identified by successive governments as a major force shaping economic and social change. To harness such changes (largely for the benefit of industry and commerce), the conservative government also introduced Foresight: a future-oriented programme bringing people together into a series of panels (including health) to share knowledge and create visions using scenario-based speculation.

8.3 Homogeneity of science

The scientific discourse portrayed within policy documents was a 'common-sense' notion, homogenous and capturing a sense of unity and commonality: it supported particular scientific approaches, institutions and individuals, to the exclusion of others[95]. The sense of homogeneity or unity emphasised that the practices associated with modern science were the natural course of events (i.e. we are all in this together) and yet the actual portrayal of science denied the breath and scope of the scientific endeavour in physical, biological, psychological, social, spiritual and other realms; the breadth of activity in scientific practices (including research); the different contexts in which science might operate; the different practices that science might encompass and who might undertake them.

One simple example of the means of portraying this was the use of bibliometrics to position the UK as a world leader in science. A recent White Paper from the DTI, *Excellence and Opportunity* (Secretary of State for Trade and Industry 2000), referred to the UK as having 1% of the world's population, 4.5% of the world's science and 8% of the world's scientific papers. Although such analysis indicated the UK's position in relation to other countries this presented a decontextualised version of scientific activity

[95] In this sense, it might also be said to be scientistic (see section below on the construction of clinical scientists, page 184).

which, for instance, hid particularly strong areas of medical or social science research, the context in which they were undertaken and their impact in relation to changing practice. Similarly, a recent analysis of NHS R&D provided a profile of primary healthcare research by number of publications, number of authors, research level and funder (NHS Executive & Wellcome Trust 2001). The use of journal citations was used as a means of measuring productivity at a macro-economic level and thereby hid meso- or micro-level practices and the heterogeneity of scientific endeavour. This is important, not only in demonstrating how science becomes constructed within policy, but also in linking scientific and economic discourses via considering productivity in this way.

a) The importance of technology

The ability to master technology was a defining factor of the UK's capacity to transform itself, with the Information Technology Revolution of the 1970s providing impetus for a new technical economic (and eventually global) system. Technological advances were regarded as opening up opportunities for new waves of enterprise and innovation. In this way, discourses of technology provided an important interlinking function between scientific and economic discourses in particular, which in turn sustained dominant discursive frameworks (i.e. what is considered technologically important was also considered scientifically and economically important and therefore promoted). By integrating science, technology and economy in this way, technological capacity was constructed within policy as an important competitive consideration.

Here technology was framed in highly advanced terms: not science but almost science fiction. For example, the DH *Science and Innovation Strategy* dedicated a page to genetics research describing opportunities for:

> "...the development of a preventative health service based on determining the genetic susceptibility of individuals to disease; the introduction of targeted therapy through the support of pharmacogenetics; and improved treatment and diagnosis of disease." (2001e:5)

Alternatively *Bioscience 2015*[96] referred to new technologies for addressing medical challenges:

> *"The new tools of bioscience*, such as genomics, proteomics, metanonomics, and bioinformatics, have the potential to address many medical challenges,

[96] See Box 13 on page 175 for a brief overview of this document.

> as evidenced by the significant investment in this area by both smaller biotech firms and larger pharmaceutical companies." (DTI, 2003a:10)

Such conceptualisations tended to be portrayed in higher-level reports (such as White Papers, Select Committee reports and Government responses to these) suggesting a colonisation of ideas by scientific and technological discourses. For instance, examples relating to healthcare highlighted throughout *Excellence and Opportunity* (Secretary of State for Trade and Industry 2000) referred to innovative imaging techniques to investigate cerebral injuries; new programmes to exploit advances in genomics and develop platform technologies in areas such as control of gene expression, analysis of gene products and DNA-based diagnostics; and the development of Medlink, a professional association to advance the interests of the medical technology sector. (Other references across texts, focused particularly on stem cell research and genetics, are explored in the subsequent section)[97]. Although such technological developments may well be of benefit, they also raise a number of questions such as, how successful are these new models? What are the alternatives? Are there any other ways that we can do things better? This suggested an ideological construction of technology to support particular conceptions of the way dominant groups believe 'development' should proceed.

b) Health-related research and scientific colonisation

The perceived homogeneity of science was reinforced by invoking examples of dramatic discovery, new knowledge and modernity:

> "Science is already central to modern healthcare, generating dramatic improvements in childhood cancer, new keyhole surgery techniques, and providing a step change in research into genetic causes of major diseases. Each time we walk into a modern hospital we benefit from decades of scientific research." (Secretary of State for Trade and Industry, 2000: 2)

Such examples – including ongoing invocations of the human genome[98] and stem cell research in particular - played an important role in setting the scene for subsequent

[97] Such developments become translated into health-related policy in relation to, for instance, the use of technology to improve communication and information through electronic records, NHS Net and NHS Direct (DH, 2001c).

[98] The scientific discovery of DNAs double occurred in 1953, though it was not until the early 1970s that the technological foundations of genetic engineering were established. However, it was not really until the 1980s and 90s that a new generation of scientists revitalised biotechnology, with genetic cloning a reality and the potential for genetic therapy becoming increasing visible. This led to funding and competition to map the human genome by increasingly advanced and technologically capable microbiology research teams (see *The Common Thread* (Sulston & Ferry, 2003) for a useful summary of these developments).

healthcare and research-related practice/s. Many examples were invoked via texts associated with HM Treasury or the DTI, which appeared to be taking a lead on policy development in this area and, importantly, appeared to shape subsequent DH texts. This was evident in a series of government spending reviews[99] and the requirement for all government departments to produce science and innovation strategies[100] under ministerial guidance:

> "...focusing on how they can maximise the potential of science and technology activities and how they can drive innovation." (Secretary of State for Trade and Industry, 2000: 41)

Whilst recognising the different programmes of work across departments, key elements required within such strategies included information relevant to R&D priorities, programmes, capabilities and procurement strategies. This reflected a colonisation of departmental agendas by centralist, scientific and economic discourses, which actively spun an intertextual web (via departmental science and innovation strategies) serving to sustain dominant discourses across the work of government and policy development. This not only shaped and framed work in relation to dominant discourses of science and innovation in particular, but also loosely equated 'science and innovation' with 'research and development'. It linked with economic discourses through reference to the 'potential' of science to facilitate technological transfer and thereby economic growth (as per the dominant and linear conceptualisation of technology transfer captured in Figure 5, page 141)

The dominance of discourses of science and technology within the healthcare realm was the means by which policy became (re)constructed and informed who and what should be involved in related research activities. This impacted on primary care research policy in advocating, permitting or negating what was possible within this discursive world.

i) A quick example: accelerated vaccine programmes

Health-related research policy was framed in specific discursive terms representing particular scientific factions in the world of health: the emphasis was on 'new' scientific and medical worlds encompassing, for example; biological, biotechnological, pharmacological and pharmacogenetic development and discoveries relating to nano-

[99] Including a cross-departmental review of science and research in 2000.

[100] This was subsequent to, and with the full weight of, the DTI White Paper *Excellence and Opportunity* in 2000 and the Government implementation plan in response to the *Council for Science and Technology Report: Review of Science and Technology Activity across Government* (July 2000).

technology, molecular biology and biomaterials. This was a world that positioned primary care as having a limited role.

One example of the means by which the scientific discourse was presented as naturally drawing on modern medical and clinical worlds related to the development of an accelerated vaccines programme referred to within the *Science and Innovation Strategy*:

> "One area in which the Department of Health plays a very particular role in technology development and transfer is in vaccines development. For example, in 1994 the Department identified the possibility that there would be an increase in Group C meningococcal disease, as had been seen elsewhere. Working with a consortium of agencies (Public Health Laboratory Service, National Institute for Biological Standards and Control, Centre for Applied Microbiology and Research, Institute for Child Health) and vaccine manufacturers, an accelerated vaccine development programme was supported. As a direct consequence of this research a full national immunisation campaign started in November 1999, and within a year all children and young people under 18 years had been offered the vaccine. There has already been a fall of more than 80% of cases, compared with the previous year and the UK is the first country in the world to use the new vaccine. To support longer term research on vaccines the Department, together with Biotechnology and Biological Sciences Research Council, Medical Research Council and Glaxo Smith Kline, provides support for the Edward Jenner Institute for Vaccine Research. The main focus of the Institute's programme is on fundamental immunology, formulation science and on developing models for vaccine assessment." (DH, 2001e: 11)

I have selected this particular example, as vaccines development is such a far-reaching programme that has been on going for over ten years with opportunities to extend and grow. However, the focus here – as elsewhere in texts - was not on breadth but largely on biotechnology and microbiological sciences. The benefits of such a programme were undeniable and so a scientific and technical world was constructed where innovative ideas within this frame must be encouraged and supported. Primary care was absent from this frame: although immunisation was mentioned, the need for transfer beyond the laboratory was not discussed, nor the social context of real-world immunisation issues. The effective transfer, delivery and take-up of immunisation programmes was essential to success here[101] but excluded from discussion (in this example, but also within the document) as it was not technologically, scientifically or economically important. This was significant in the context of my research as those areas committed

[101] For example see McMurray et al (2004) that explores parents accounts of decision making in relation to the MMR vaccination and identifies determinants of uptake and education needs; or Wolfe & Sharpe who draw attention to the influence of values on immunisation through an account of the anti-vaccination movement pointing to deeply held political, spiritual and philosophical beliefs that challenge extended government powers over 'traditional civil liberties in the name of public health' (2002: 402).

to considering such aspects include health services and primary care research that do not appear to fit neatly with the dominant discourses employed.

ii) Scientific colonisation of primary care research

This scientific (and scientistic) discourse was captured across a wide range of documents in this era; sustained by intertextual language and references and representing a communicative discourse in that it was oriented to reaching understanding between key players[102]. When it came to health-related research, two particular documents – *Bioscience 2015* (DTI, 2003a) and *Strengthening Clinical Research* (AMS, 2003) - directly and explicitly informed *Research for Patient Benefit* (DH, 2004b). Together they formed a strong vision of UK research infrastructure and activity from 2004 onwards (refer to Box 10 on page 136). What was significant throughout analysis of these documents was the absence of primary care in any depth: although texts might have related to healthcare, very little (if anything) was made of primary care specifically. This was a reflection of the texts themselves (not of my own process of sense-making) and of the weight given to science and technology within these texts[103]. Here, notions of any scientific contribution by primary care research drew on strategic discourses (i.e. oriented to instrumental goals and to getting results), with an implicit aim across documents to recruit increasing numbers of patients to clinical trials via the primary care system[104].

This has been influenced not least by the potential of biotechnology, unleashed by the mapping of the human genome and by subsequent competition across countries to increase expenditure on genomics and to speed up the process, understanding and patenting of specific genes and what they do. It equates to a colonisation by science across health-related areas and was summarised by one interviewee reflecting on the modern development of primary care research:

> "I think what's made it more difficult is the enormously exciting growth of biomedicine: the gene laboratory-based science, huge technology, and wonderful advances that are world study, all of which I'm sure that you know about. And I think that has diverted an ever-increasing amount of

[102] The notion of strategic and communicative discourses is drawn from Fairclough's book on *Language and Power* (2001), following from Habermas (see page 97).
[103] Primary care research is not specifically raised in any of these reports however; general practice is mentioned in the annex to *Research for Patient Benefit* in discussing incentives for research and possible inclusion within the new GP contract. Refer to pages 219 to 220 for further discussion of this).
[104] I explore this in more depth in considering 'new research collaboratives' (see page 181).

attention, emotion and resource to *that* kind of research." (Senior academic general practitioner, high profile policy input)

This extract was significant in that it acknowledged the wonders of science and the importance of discovery but emphasised the disproportionate attention received by biomedicine. This drew attention to the active support of particular types of research and associated institutions (e.g. professional, clinical, corporate). Others were left to react to the dominant view of what is acceptable and worthwhile in scientific terms. This dominant model of scientific discovery was associated with medical, pharmacological or biotechnical worlds and contrasted with the everyday work of primary care research that studies psychological, spiritual, emotional, behavioural, sociological, experiential and organisational aspects of health, illness and disease in primary care settings by drawing on, for instance, patient experiences, doctor-patient interactions, organisation of care, prescribing behaviour, and interprofessional relationships. For instance:

"So I think that starting at the sort of micro level, a lot of research on general practice consultations and patient behaviour, doctor behaviour, you know, consulting has been important. I think referral research has been extremely interesting, you know, there's quite a lot of the health services research about how general practice works, and actually, you know, the stuff that people have done on new methods of accessing care, NHS Direct, walk-in centres, I mean, you know...these things have got to be researched..." (Senior GP academic, SAPC representative)

This contrasted with the 'laboratory-based science' and 'huge technology' referred to in the previous extract. This was further emphasised by a nursing academic who reflected on the typical association between nursing research and particular methods as being subservient to the scientific discourses in play:

"Well I think there is an assumption that nursing and research is all woolly and its all qualitative, soft and therefore lower on quality somehow than as you say 'big science'. I think the two points to make there, that *even* such august bodies as the MRC are now saying that in order to study complex problems of healthcare, the need [for a] multifaceted approach is in their evaluation, and therefore we do actually need qualitative approaches within the midst of the big science... the second point *is* that...nurses are getting much better at designing studies which are quantitative - for want of a better word – and that, you know, I suppose, getting more sophisticated to ask, designing studies that will fit the question." (Senior academic nurse)

This extract indicated that the situation is more complex than a simple overriding domination of health services and primary care research by modern scientific

discourses. However, the phrase "*in the midst of...*" is revealing in demonstrating that such approaches are incorporated within dominant models, as opposed to operating independently of them, indicating a need for different approaches and a breadth of knowledge to address different problems.

8.4 Economic value of research

One of the major changes that has affected spending on science since the early 1990s in particular has been the growing demand for relevance. This may be interpreted in many ways but can essentially be seen as a growing requirement that the government science budget should support research that will be of relevance to wealth creation in the UK economy (Stoneman 1999). The key message across the policy documents studied was that the potential of the UK economy to create wealth must be more firmly rooted in knowledge-intensive activity, which the Government has sought to encourage through a series of policy statements and reforms. This built on earlier debate from the 1970's that sought to align research more closely with economic interests (Cabinet Office 1972; Lord Privy Seal 1971), the main difference being that this drew on conceptions of economy in terms of *efficiency* and *effectiveness* of government departments and bodies allowing research and information to inform decision making. More recent emphases have been placed on the importance of levels of *productivity* and *consumption*. Recent policy documents have therefore shifted emphasis; drawing on global (as opposed to national) economic activity. This was evident in the following extract relating to the bioscience industry:

> "The UK has stated objectives to increase economic productivity and global competitiveness. The bioscience industry can play a key role in helping to meet these objectives. The US has held the benchmark for a competitive economy and has a clear strategy. It has moved low value-added manufacturing offshore and has focused on creating a knowledge-based economy, with high value-added jobs. This remains the UK's aspiration." (DTI, 2003a:13)

By holding up the US as the ideal knowledge economy, this promotes UK aspirations as a global competitor. This policy approach appeared to have facilitated, but not been the only contributor to, a greater emphasis on science and technology as an answer (or *the* answer) to modern economic and competitive woes in global markets. According to Cassells (1996) the shift in the nature of our economy has been facilitated by information and communication technologies which, in turn, have facilitated a new global reality: one where the economy has the capacity to work as a unit in real time on

a planetary scale. What followed was an explicit recognition that R&D was integral to UK economic survival and global competition:

> "...we've got a higher research investment in this country than pretty much anywhere. And that is fragile ...there's a big, you know, there are big opportunities to be much more efficient, as well as to take advantage of the unique features of the NHS. So this, my strapline about making the UK the best place for clinical research in whatever period isn't a, you know, it's a reasonable aspiration, but it's not a pushover.
> And if you think both in terms of well the factors for health and the factors for wealth: I mean, having the best indicator for people's health is that they are almost fully employed in businesses that they find engaging and satisfying to contribute to, you know, it's a lovely picture if you can get it, that's what Singapore is trying to do, you know. So, and it's perfectly clear that if China were at the point that we were in the 1960s then we could all pack up and, you know! So there's a real, I'm not over-dramatising by saying that in part this is a question of national economic survival..." (Senior DH policymaker, research policy development)

Although this extract appears to be focusing on business R&D, it was actually drawn from a discussion about how and why new arrangements for *all* types of health-related research have come about. The extract captures a view from the Department of Health that was reinforced across many documents (particularly those from the DTI and Treasury) and positioned the UK in these global terms. The rooting of global discourses alongside scientific and economic discourses was then reinforced via, for instance, drawing on data such as bibliometrics (see page 152) or trade figures to justify comparisons across countries and inform policy relating to competitiveness and productivity.

a) New Labour and the global world of science

The link between global discourse/s and research was forged following the election of New Labour in 1997 and a revised political, economic and scientific agenda. Initially New Labour continued the Conservatives' funding priorities until it had undertaken its own Comprehensive Spending Review of all public expenditure that saw science emerge as a priority. Three years later, in advising the government on the exploitation of science and technology, the Council for Science and Technology described profound changes that were occurring worldwide that the UK government must respond to. These were:

> "...increasingly being seen in terms of a third industrial revolution. By this is meant one in which wealth creation and competitive advantage is becoming increasingly underpinned by creativity and knowledge rather than

> by just the ability to organise capital, labour and resources to make and run things efficiently and cost effectively." (Council for Science and Technology, 2000: 26)

From this perspective it was the discourses of science and technology – as the means of producing knowledge - that needed to be sustained and exploited in order to support economic discourses and global competitive advantage[105]. This was reflected throughout this and other documents facilitating an intertextual web to sustain these discourses and construct a natural argument for ensuing policy.

The interrelationship between science and technology on the one hand and the national and global economy on the other became more closely intertwined via discourses of innovation and competition, promoting and supporting the view that science and technology add value to the UK economy in terms of GDP, economic growth and labour productivity (HM Treasury 2004a). This was evident in the language above focusing on 'wealth creation', 'competitive advantage' and the emphasis on 'creativity and knowledge'. In the context of this document, 'creativity and knowledge' appeared to be used in the sense of new economic forms based on directed 'inventiveness and information', as opposed to 'imagination and intellect', reinforcing accepted notions of what might be considered productively innovative[106]. These discourses then increasingly shaped new arrangements for health-related research infrastructure. For instance, to return to the interview extract on page 160, although *Research for Patient Benefit* was situated as a solution to two problems of *health* and *wealth*, it is the economic discourse that largely shapes both, with health benefits largely framed in terms of labour.

i) Legitimacy, trade and industry

The early years of New Labour demonstrated a marked difference (as opposed to a radical change) from previous successive conservative governments[107] and associated discourses. The modern economic and scientific agenda was given full government

[105] EU administration was also influential in this area, seeking to make the EU as a whole the most dynamic, knowledge-driven economy in the world by 2010. European leaders agreed in 2000 to setting an aspirational target of 3% of GDP to be spent on R&D in all sectors by 2010 across Europe. The UK have yet to commit to this, instead focusing on a long term goal – announced by the Chancellor in 2004 - of 2.5% of GDP by 2014 (HM Treasury 2004a).

[106] As I come on to describe in Chapter 10, creativity and innovation have a number of meanings, but recent research policy has focused on inventiveness and originality in order to direct innovation towards what might be perceived as a wealth generating path.

[107] Including an emphasis on the importance of technology to the UK economy; the introduction of an R&D tax credits; and increased emphasis and spending on science over and above what was considered desirable by the previous government.

backing through a series of White Papers early in New Labours' first term, gaining legitimacy via the legislative status of documents and followed by a range of high level initiatives to translate this into strategic goals and policy objectives and thereby sustain dominant discourses into the 21st century. White Papers - including *Our Competitive Future: Building a Knowledge Driven Economy* (Secretary of State for Trade and Industry, 1998)[108]; *Creating Knowledge, Creating Wealth* (Baker, 1999)[109] and *Excellence and Opportunity: a Science and Innovation Policy for the 21st Century* (Secretary of State for Trade and Industry, 2000)[110] – were associated with the DTI and/or HM Treasury, thereby drawing on implicit but established economic infrastructure. These and subsequent documents - such as the *Science and Innovation Strategy* (DH, 2001e), the 2002 *Comprehensive Spending Review* and subsequent budget speeches, the *Innovation Report* (DTI, 2003), or the *Science and Innovation Investment Framework* (HM Treasury, 2004) – all drew on and sustained dominant discourses of science, economy, globalisation, technology, innovation and competition. For example, focusing specifically on health-related documents:

> "To be successful in delivering effective health and social care and improvements in health and quality of life, we need to be successful in generating and disseminating knowledge and exploiting it for the benefit of patients, users and the public. In particular we need to support and facilitate innovation to turn ideas and knowledge into new products, interventions and services. Industry, the universities, other research establishments and the NHS are all sources of new ideas and new technologies; partnership between these is critical to maximising benefits to patients and to realising wider commercial benefits for the nation." (DH 2001b: 6)

Here, the emphasis was on newness and knowledge exploitation as providing benefits of health and wealth at a national level. Other documents – particularly the White Papers and Budget Reports referred to above - more strongly emphasised the need to identify an area for the UK to become a strong contender within competitive global markets and to invest for long-term rewards. This was located in scientific and technological endeavour:

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[108] This White Paper instigated a rise in financial support for horizon scanning including a doubling of the financial support for Foresight panels. It is worth noting that Stoneman refers to the contrast in such exercises between the UK and other countries where early consultations also placed a matching concern on quality of life issues which was absent from early stages in the UK (Stoneman, 1999).

[109] Also known as the Baker Report, this joint DTI/Treasury paper investigated the commercialisation of research in the Government's public sector research establishments.

[110] Here, the DTI set out the role of the Government as the key investor in the science base, the facilitator for university/business collaboration, and the regulator for innovation, including the promoting of public confidence in science.

> "For Britain to prosper in the 21st century...we must have a first class process for pursuing scientific advance and using it successfully. We must have the ability to generate, harness and exploit the creative power of modern science." (Secretary of State for Trade and Industry, 2000:3)

This emphasised a *modern* scientific discourse that marries with earlier discussion around development of a third global industrial revolution and the transition away from a traditional focus on the engineering based and large-scale industrial production and towards microscopic 'discovery' that is increasingly inaccessible to the public without the process of technological 'transfer' (see Figure 5, page 141). Once again this was linked with, for instance, advancement and inventiveness to emphasise the role of scientific 'discovery' as a means of generating prosperity. Within the *Science and Innovation Strategy* cited above, this was more subtly conveyed, being situated within examples such as the strategic development of genetics, biotechnology and vaccine development; supporting and working with the pharmaceutical industry to ensure the UK remains an attractive base for industry; and encouraging the exploitation of intellectual property within the NHS to ensure innovations are identified and managed.

The authorship and focus of such documents represented the increased importance placed on the DTI and OST, as well as the centralisation of responsibilities for civil R&D spending in particular (Stoneman 1999). Business R&D was powerfully placed to shape the agenda for research in general. This raised questions regarding how the agenda is shaped for health and for research: whose knowledge is economically privileged or viable? What are the boundaries of knowledge within discursive constructions? What is regarded as useful or valuable knowledge? And what forms of research are constructed as being able to deliver this?

Primary care has been unable to effectively compete within this arena. Although the emphasis on a primary care-led NHS has continued this has been subsumed by a reworking of economic and scientific agendas. Herein lies a tension between the healthcare system (with a primary care ethos and research regarded as resulting in health benefit) and wider economic concerns (where research is regarded as facilitator of wealth creation).

ii) Research, competition and productivity

One of the biggest changes in terms of policy language used throughout documents related to the relative national performance and the comparative nature of R&D

investment and returns. Although specific business-related terms such as 'R&D intensity'[111] were not used in interview texts, the broad language of competition and comparative performance were evident in some of the language employed by government representatives (see, for instance, the quote on page 160).

In addition, policy documents drew heavily on discourses of globalisation and competition to construct a view of what was considered acceptable economic performance. This was achieved via comparison to other countries and using basic quantitative data relating to national R&D investment or R&D as a percentage of GDP. As might be expected, those documents produced by the DTI or HM Treasury drew heavily on economic discourses to facilitate growth via, for instance, the provision of R&D tax credits to attract investment[112].

b) Economic viability and competitiveness of primary care research

Primary care research did not fit neatly within this global competitive framework. Although progress has been made – for instance, in relation to growth of academic departments of primary care, development of networks, numbers of research active practitioners, or access to funding and infrastructure support (see Appendix 2) – the ability of primary care research to compete within this dominant discursive framework was not evident. This was embodied in the texts of academic primary care:

> "I just don't think at the moment we are producing it. I said at a big lecture, we'll know we've made it when we have a Nobel prize from a GP, and the whole room laughed... I also think the system would be slightly biased against giving a GP a Nobel prize because the Nobel system is actually biased towards basic science." (Senior academic general practitioner, high profile policy input)

> "So there's quite a lot of investment into developments and I am not sure what the impact of that investment has been, i.e. how many new researchers have been prepared and are now leading their own programmes, what the

[111] The ratio of R&D across the economy to national gross domestic product; and regarded as an important indicator for assessing innovation performance within the UK economy (see for instance the *Science and Innovation Investment Framework*, HM Treasury, 2004a).

[112] Of interest here was the use of rhetorical devices to support such arguments within the texts studied. Little is actually known about the real impact of such changes in different contexts and yet, for instance, in relation to tax incentives for R&D the *Science and Innovation Investment Framework* (HM Treasury, 2004a) reported on the base of "strong academic evidence" but cited only a single working paper from an economically-oriented institution - the Institute for Fiscal Studies – with no consideration of other approaches or wider issues and no other 'strong' evidence cited in this context. Other approaches to examining this may include the loss of tax revenue as a result of R&D credits and the impact this may have on, for instance, provision of public services or in influencing the extent of the UK wealth gap between rich and poor.

> impact on the investment in research has been, and how much of that is developing practice and improving practice. They're very difficult things to follow aren't they?" (Senior academic nurse)

These interview extracts drew attention to the bias within the system in which primary care research has to operate being predisposed, firstly to basic science, and secondly to quantitative measures relating to productivity and return on investment. The use of the term 'difficult' by this senior academic nurse highlighted the more complex and contingent measures appropriate to the nature and conduct of primary care research that it is impossible to fully appreciate by simply considering the sum of the parts (as with the earlier example of bibliometrics, page 152). To explore this in more depth I turn to interview texts to reconsider the apparently un-global nature of primary care research.

i) A watering down of primary care research

The practice of primary care research is regarded by many as quintessentially multidisciplinary[113]:

> "The issues that have to be addressed have to be managed and supported by multidisciplinary approaches, therefore research questions are often going to be asked of multidisciplinary practice and need multidisciplinary research teams to answer those questions." (Senior academic nurse)

However, there is a balance to be struck within policy vis-a-vis inclusivity versus specificity. Hence the same interviewee continued:

> "And it's very difficult in a discipline such as primary care, which is so wide-ranging. Are you inclusive and therefore risk being a bit waffley and trying to be all things to all men or do you decide to go for a sharper focus? It's quite difficult in terms of the policymaking agenda."

This has presented particular challenges for primary care. The texts studied indicated a tension between the majority who suggested that it was necessary for primary care research to compete in terms of dominant scientific, technological, economic and clinical discourses and demonstrate value for money and production in terms of high impact publications in international journals and, where possible, scientific discoveries (including representatives from DH, pharmaceutical industry, and some GP academics); and those who appeared to support a more resistant approach that acknowledged the

[113] For instance whilst Charles-Jones, Latimer & May (2003) draw attention to the maintenance of old hierarchies of work and knowledge, they also describe a redistribution of work across a range of primary care practitioners; and Greenhalgh, Voisey & Robb (submitted) point to the shift amongst general practices from limited external links to many that are based around collaborative working practices.

breadth of primary care and challenged dominant discourses (including senior nursing academic, non-clinician, some GP academics, and the representative from INVOLVE). The former framed this later approach as a 'watering down' of primary care research, associated with outcomes around mentoring and support, a breadth of publications and links with service development via the NHS. Combined with multidisciplinarity embodied particularly in the work of local primary care research networks since 1997, these were not regarded as measures of competitiveness or the language of dominant discourses. This is demonstrated in the following extract from an interview with one senior academic general practitioner:

> "I was very sceptical about the quality of the work being done through the local networks: one or two of them have been successful, most of them haven't been, and I thought that inevitably it would lead to a questioning of the value of investment in primary care research...I believe you should support excellence in research, you don't need lots of competing and potentially reduplicating networks. So I took a rather, probably not terribly supportive about the philosophy of letting a thousand flowers bloom because I just knew it was doomed to failure, I knew that the productivity would be low in many cases....because it was the *Mant Report* that led to the setting up of a lot of local research networks wasn't it? ...So I guess I was a bit sceptical about that aspect of the, I mean I could see why it was being done...because again it supported emerging primary care departments, but I wasn't convinced that was the right way to do it, and as I say I would have favoured something more corporate. But again it goes against the ethos: everyone wants a slice of cake so they all go themselves, I'll have my little local clinical network, but which of them have produced any research that's of international relevance..." (Senior academic general practitioner, regional primary care, strategist)

By reflecting on competitive aspects of research, referring to the lack of productivity in the previous era and the need for a more corporate approach, this extract clearly situates primary care in relation to dominant discourses. It suggests that primary care research needed to compete within the wider economy: to produce and return on investment in order to survive. The extract links with global discourses to emphasise international relevance as a criteria for judging success and for competing in the research world. This interviewee therefore concluded that primary care research must situate itself in an international role beyond the confines of locally defined network boundaries. To reinforce this, the previous 'Mant' era was framed as unsuccessful in promoting widespread localised activity rather than competing on these terms.

This view of primary care needing to compete in terms of dominant discourses (as opposed to challenging them) is reflected elsewhere. In particular, senior DH

policymakers confirmed the unsustainability of this utopian model of letting a thousand flowers bloom, not least in economic terms:

> "We've come to the point where we think 'well, there's no point in putting more money into this without creating more people who can produce a high quality output'; and also of course we're bound to now be thinking 'well, we've got these people going', but it was never our intention simply to give them a large amount of money to do whatever they please with, because the purpose of it is to create a resource which will apply itself to problems that everybody agrees are important enough to spend that effort on. So this is *not* about entertaining GPs in their evenings! It's time to, you know, put up or shut up to some extent!" (Senior DH policymaker, research policy development)

This emphasis contributed to the dissolution of the old utopian model of locally grown networks and multidisciplinary activity (see pages 132 to 138). Funding was reallocated and infrastructure reorganised to ensure fit with the new managed research structures[114].

On page 128, I drew attention to the use of economic and legal discourses within the *Mant Report* (1997) to urge the government to support primary care research as a means of benefiting health and the economy. The lack of competitive success and productivity that followed was seen by some academic GPs as largely due to a lack of attendant focus on the development of critical mass at senior level:

> "...my personal feeling is that we may have done serious damage in 1997, because we stimulated an increase in activity without managing to protect this core. And that core is now getting to the end of their useful life and we haven't adequately managed to deal with cessation, or protect them so they could have been as productive as they might have been. So whether the actual state of research in primary care in the UK now is healthier than it was seven years ago, I sort of doubt." (Senior academic general practitioner, regional primary care)

This small critical mass was regarded as important in focusing the agenda, developing capacity and in providing legitimacy for research activity (i.e. in relation to dominant discourses). The suggestion by some academic GPs was that an increase in activity resulted in a loss of focus that, in turn, made it harder to align with dominant discourses.

ii) Reproducing colonisation

Although it has had to change, being less shaped by medical discourses alone[115], it is general practice that remained the 'strong man' of primary care research. This is not

[114] See for instance Box 10 (page 136) and discussion regarding 'new research collaboratives' below.

new: it is well documented that access to professional, medical and employment discourses have placed general practice in a more powerful position than clinical or non-clinical primary care domains. As one nursing academic reflected:

> "...general practice has colonised the term primary care and they see it as synonymous with general practice, and very often when you read stuff that's by general practitioners and they talk about nurses in primary care, what they mean is practice nurses, they don't actually mean district nurses and health visitors." (Senior academic nurse)

This colonisation was encapsulated in the linguistic resources drawn upon through many of the texts studied. Many of the academic GPs interviewed fluctuated between the terms 'general practice' and 'primary care' and those policy documents that drew attention to some aspect of primary care research used similar language to do so[116]. This suggested a reproduction of dominant power relations in the microcosm of primary care; being brought about as a result of wider scientific colonisation and the repositioning of general practice and primary care in response to this.

The view from academic general practice

From this perspective, the colonisation of primary care research by general practice presented an attempt to line up with dominant discourses and portray a mature discipline, able to participate in and shape current policy. Indeed, the argument for this was not dissimilar to that within the *Mant Report*: that as the most well-developed, mature and established area of primary care it was able to present a respectable, powerful and competitive face to contend within (and influence) dominant and colonising discourses described above. From a general practice view it was also general practice that needed to be in the foreground in order for primary care research to compete. The following extract explores this, drawing on notions of medical training, clinical practice and research skills:

> "I think that that focus on general practice stems from two issues: one is that the service itself was general practice-led and is still to a great extent general practice-led, and therefore there's people who actually have control of the service are general practitioners. So it's not a primary care-led service

[115] This was signified, for instance, by the inclusiveness of the Society of Academic Primary Care that has needed to extend and expand its membership beyond the traditional general practice contingent Indeed, the Society of Academic Primary Care was only recently renamed, being formerly the Association of the University Departments of General Practice.

[116] For instance, *Research for Patient Benefit* (DH, 2004b) discussed the use of incentives for research in primary care and referred solely to the general practice contract as a means of achieving this, thereby negating other activity in this setting. This was also the only reference to any element of primary care throughout the report.

> it's a general practice-led service. And the second thing is the research skills, and the whole research activity is dependent on individuals and you could, if you looked around the UK and thought where does all this research activity - successful research activity - stem from, although there are now I think about three hundred people who would class themselves as clinical academics working within UK primary care, of which you know ten might be nurses, two might be physiotherapists, the rest are going to be doctors, you'll probably only find thirty of those who have high enough level research skills that they can compete both internationally *and* with colleagues in other disciplines. Those individuals, the majority of them are general practitioners, and certainly it's much more likely that you will have sufficient skills to compete in research if you've been selected and trained in medicine, than if you'd been selected and trained in another discipline..." (Senior academic general practitioner, regional primary care)

This extract is significant in elucidating the nature of employment relationships within primary care: from this perspective equity is impossible as general practitioners are those leading the primary care service as a whole. However, this particular interviewee goes on to connect medical training closely with relevant research skills. This is a powerful statement, making a strong connection between professional training and skills for research. It contrasted strongly with the view from clinical and non-clinical researchers (explored below) and was not a view that was presented as powerfully by other academic GPs.

<u>The view from the Department of Health</u>

The view from the DH tended to focus on the medical side of primary care, thereby reinforcing the view from general practice (or vice versa). The texts studied from this perspective generally showed a fundamental lack of appreciation for the breadth of primary care, resulting in a very particular view of primary care research and a particular view of how primary care research might fit within the competitive global economy.

The process that was described relating to the means by which recent research policy changes were negotiated and developed (for instance, in relation to the development of the UKCRC/N) supported this view of representation by general practice within R&D policy processes as the face of primary care. The view held by some (though not all) DH representatives and academic general practitioners emphasised a focus on primary care, as opposed to general practice, as politically correct lip service.

The view from clinical and non-clinical primary care researchers

The views from academic general practice and the Department of Health stood in contrast to those representing nursing and non-clinical aspects of primary care research who embraced a multidisciplinary perspective:

> "...there are views out there that what general practice research should really be about is conducting controlled trials of interventions in kind of, you know, the scientific paradigm. And there are the pressures obviously for general practice community studies to do well in terms of university expectations, which means do well in the RAE and it may be that the kind of the multidisciplinarity means that the top journals don't, you know, you don't get published in the top journals, things take longer. So there's a whole series of things that may make people worried about the quality of the research. I don't buy into that but then I wouldn't because I'm a nurse." (Senior academic nurse)

This extract was significant in reinforcing the view, suggested earlier, that there are tensions within primary care research vis-à-vis those who wish to align with, and those who wish to challenge, dominant discourses. This academic nurse suggested that whereas general practice faces pressure to align or conform to dominant research indicators, those in nursing are not faced with the same pressure. It should however be remembered that, unlike interviewees representing the Department of Health or general practice, this is one person's view. However, it was, to some extent, mirrored within my interview with a senior academic non-clinician. They drew attention to an alternative view to the hierarchical approach of general practice, suggesting that GPs were one building block within a successful research team, as opposed to the view of the 'strong man' of primary care research. To emphasise this, they pointed to the focus on professional and clinical skills, as opposed to research skills, within academic career structures;

> "Surely you just need one academic career structure, you need to say 'this is what we pay people who haven't got a PhD, this is what we pay people who have got a PhD; this is what we pay Senior Lecturers, this is what pay Readers, this is what we pay Professors; here are the things we see as important if you're going to get progression.' OK so the response comes 'well, you cant do that because GPs won't have academic appointments because they wont earn enough money; you've got to have a separate for clinical academics.' Why? We should be paying people for their research skills not their clinical skills. But they're the people, they're still the people with the power. They've got the negotiating power." (Senior non-clinical academic based within primary care)

Whilst they acknowledged that things are slowly changing (though a substantial disparity in salary still exists), this and other extracts drew attention to the power base of primary care research being placed firmly with general practice. This was most evident in discussing the influence of the Heads of Department group[117]:

> "HoDs is a strange group, its quite a large group now but there's very, it's a very small group of HoDs who are the people who have power and influence." (Senior non-clinical academic based within primary care)

This was seen as contrasting with the primary care membership of SAPC, a view that was reinforced by the senior GP academic representing SAPC:

> "I think non-clinicians could justifiably criticise the organisation for concentrating repeatedly to the exclusion of their problems on the terms and conditions for academic GPs, actually. That's not to say that we haven't done anything, it's not to say that they don't benefit from the general improvement in funding and departments, but actually, and the other thing is it's bloody hard to think of a solution, I mean, what are you going to say?"

Both of the interviewees cited above agreed that this is slowly changing due to the need to embrace a wider membership and secure a healthy financial future for SAPC.

iii) Loss of control

I have already shown how research policy has come under greater centralised control. Primary care is no longer included within this policy process. As one GP academic reflects:

> "...the fact that at this moment the UK CRC and these great trumpeted new collaborative hasn't got a single primary care researcher at the table, is ominous evidence that we're not at the top table, literally." (Senior academic general practitioner, high profile policy input)

Primary care appears to have little input to how it may or may not be able to adopt a competitive stance within the global economy. Instead, primary care research is left to respond to external events that are beyond its control. One senior GP Academic referred to the views of the new Director of R&D[118] as capturing this:

> "...she was talking about the additional 100 million that's going into clinical networks and made a throw away comment that unless primary care

[117] A group largely made up of GPs that operates as the formal governing group of the Society of Academic Primary Care.

[118] This interviewee was referring to Sally Davies, appointed DH Director of Research and Development in Autumn 2004.

> networks were collaborating strongly around the clinical networks then they would find it very difficult to survive." (Senior academic general practitioner, capacity building)

As discussion continued within the interview, I was informed that primary care research was being asked to prove itself following the Mant era (reinforcing previous findings: see pages 132 to 138), and that those involved can cooperate within this framework of activity in order to demonstrate that they are worthy of continuing. This fit with other views regarding the need to respond to these new, external pressures or disappear:

> "Well I think there are two scenarios: one is that we will make real progress by...identify[ing] the big questions that can only be done in the primary care world, and link up with basic science which I agree with, link up with specialists where they're relevant I agree with; and produce really major studies and I think that's possible, I think that's on and that's the plan. The disaster scenario...is that we are simply taken over by the secondary care machine and are relegated to be sort of community outposts for supporting and gathering data and backing up the real drivers of big teaching hospitals." (Senior academic general practitioner, high profile policy input)

This strongly reflects earlier discussion regarding scientific colonisation. The only alternative is constructed as a tragedy, a disaster, something that is potentially unworkable, catastrophic and unrecoverable (i.e. where primary care research has such a restricted access to power and knowledge that resistance becomes entirely problematic). Interestingly, the alternative response – 'the plan' as it is termed in the above quote by a senior academic general practitioner – is not portrayed as a viable or jubilant scenario: it is presented simply as a means of surviving. What is *not* considered as an alternative is the explicit resistance to dominant discourses and scientific colonisation. Maturity is seen in policy terms as compliance or integration and competing on similar terms in relation to dominant discourses. Not 'maturing' in this way is seen as not surviving. Such an approach appeared structurally facilitated via the consumption of primary care research by strands of basic and biosciences within the Research Assessment Exercise where is has been hidden within health services research or population sciences.

This suggested that there were fewer opportunities for primary care research to contribute to and shape policy discourse/s, but more opportunities to be positioned by and react to it. This was embodied in recent events to address the role of primary care trusts in relation to research. Box 12 details the development and demise of a recent Joint Ministerial Review to show how primary care research – or those called upon to represent it - responded to dominant discourses and had little input to the course of

events[119]. The review also embodied a lack of understanding about what primary care research is, where it is undertaken and by whom. Hence, although the review may or may not have come at the right time for PCTs, by focusing on service delivery organisations in particular, it failed to recognise the full range of other organisations involved and lacked contextual understanding about the role and potential of research within PCTs. As the only major piece of policy related work to come out of government specifically dedicated to primary care research (as a whole) since the 1999 strategic review (Department of Health 1999a), this was particularly relevant.

Box 12: The conception, development and demise of a Joint Ministerial Review

In 2002 a Joint Ministerial Review was set up to explore the role of primary care trusts in relation to both education and research. The description of events that follows has emerged from the texts studied and uses the language of policy documents and interviews to portray events as they unfolded…

When primary care trusts were given the power to purchase healthcare, major teaching hospitals recognised that they might face a costing problem: if they charged what they needed to charge to support teaching and research infrastructure then those paying might look elsewhere. This quickly distilled itself into an issue of whether those in primary care recognised that they had a *duty* to support teaching and research in the hospitals from which they would be purchasing care.

The House of Lords raised this in 2003 during a debate on the Health and Social Care Act 2001. The debate raised the matter of whether to make it a duty of PCTs to support teaching and research. The Minister responsible – Lord Hunt - felt they already had that responsibility and proposed to explore how primary care would support teaching and research.

The review group was set up to progress this work, essentially looking at the academic PCT. However, no funds were made available to resource the work and the review faltered. A final report was eventually released in January 2005 however, following a ministerial reshuffle and shift in priorities, the report was never enacted.

The impetus behind the review was also significant: the description in Box 12 indicates concerns over research infrastructure at hospital level, rather than being initially driven by a primary care research agenda *per se*. The lack of support for primary care research at ministerial level was suggested by the subsequent scaling down of the agenda; the lack of resources made available; and the subsequent failure to enact the report.

[119] My own experiences are relevant here. I was involved in evaluating pilot Primary Care Trust Research Management and Governance sites. The managerial group overseeing this work subsequently transformed into something called the Significant Issues Group which fed into the JMR. Given my prior involvement, I was called upon to feed into an initial pilot survey and subsequent guidance for PCTs.

8.5 Strengthening Corporate Discourses

The contribution of industry was emphasised as one of the key drivers for developing economic growth via research and development. This was embodied in the pharmaceutical industry:

> *Sara*: "And what are the issues now...that you think that [R&D has] been responding to or being forced to respond to?"
> *DH Representative*: "OK. It's the recognition that the medical-pharmaceutical etc industry is actually a major contributor to United Kingdom plc, and that it was experiencing more and more difficulties in working with the NHS which should be a really powerful deliverer of health research. And Government clearly wanted to support its industrial wealth component, it wanted to recognise that good health and wealth went together and that this might well be based on the delivery of high quality research." (Senior DH policymaker, research capacity building)

It is the economic discourse that frames this discussion by initially drawing on notions of industrial wealth and invoking a corporate image of the UK as a public limited company – a metaphor that instantly homogenises the UK and suggests everyone equally and willingly accepts such corporate emphases. This corporate discourse - running throughout many of the policy documents studied since 1997 in particular – appeared to be sustained by the influence of industry on central government. I do not wish to suggest that it marked the beginnings of a *new* corporate discourse, but this appeared to represent an important *shift* in terms of the increased prominence of corporate discourses, with the potential for UK economic strength in global markets clearly situated alongside the success of the pharmaceutical industry:

> "Business research and development in the UK is heavily dependent on the efforts of a few leading firms concentrated in just two sectors, one of which is pharmaceuticals. So the Government is committed to making the UK the best place in the world for health research, development and innovation. The Department of Health will ensure that the NHS contribution to health research is a centrepiece of that ambition." (DH, 2005a: 4)

> "Because the pharmaceutical industry is a very important industry as far as the United Kingdom's concerned, our balance of trade is in excess of three billion pounds per annum." (Senior representative, UK pharmaceutical industry)

The later extract draws on accounting discourses to present the pharmaceutical industry as integral to ensuring a balanced economy. It was evident from the data that this contributed to an increasing commercialisation of health-related research and associated

policy. An explicit contribution to economic growth[120] has provided industry with access to power and influence that facilitated a shaping of policy discourse that other sectors (including primary care research) have been unable to achieve. The intertwining of corporate, economic, scientific and global discourses ensured each was able to draw institutional support from others. Hence, my discussions with a pharmaceutical industry representative very much reflected the content, language and ideology of government documents and interviews with some DH representatives in a way that other discussions did not[121]. This corporate discourse was then sustained and reproduced via a raft of other policy related documents (see Box 13 for examples).

Box 13: Examples from documents sustaining corporate discourses associated with the pharmaceutical industry

Bioscience 2015 (DTI, 2003a) reported from a dedicated Bioscience Innovation and Growth Team set up by the DTI and sought to overcome threats to the UK bioscience industry and develop its vision that the UK will have secured its position as global leader in bioscience by 2015. This was discussed in the context of international competition with a view to "developing large, profitable world class companies, second in size and achievement only to the US." (page 8)

The **Science and Innovation Strategy** (DH, 2001e) acknowledged the Department's major strategic role in ensuring that the UK is an attractive place for industry. This, it was stated, is being achieved through the work of the Pharmaceutical Industry Competitiveness Task Force (PICTF). The research-based pharmaceutical industry was being acknowledged as: "the most important innovative high-tech industry in the UK, accounting for 23% of all expenditure on manufacturing R&D." (page 4)

The **Science and Innovation Investment Framework** (HM Treasury 2004a) referred to pharmaceutical R&D investment as significantly above international average and held the pharmaceutical industry up as a good example for UK industry as a whole.

One interviewee suggested that such policy discourse formed an ideological basis for action, as opposed to a more evidence-based practice approach to the use of scarce resources:

> "I think that there is something about the policy eye being off the ball of the effective use of limited resources and on the ball of let's get a lot of competition and have these guys kind of compete for their business." (General practitioner, no research policy experience)

[120] For instance, ABPI (2004) cited that pharmaceutical companies carry out around a quarter of all business R&D in the UK and in 2003 invested over £3.2 billion in UK R&D.

[121] In particular, DH and pharmaceutical industry representatives were more explicit about links between economic growth and research policy.

This suggested that health and related research policy are subject to economic rules of business and competition and reinforced earlier findings on economic viability and competitiveness of primary care (see page 164). The relationship between corporate discourses and those of government bureaucracy was witnessed by one GP academic who drew attention to the use of similar linguistic resources across discourses – the pitch and spin – linking the language of UKCRC and that of the pharmaceutical industry:

> "I saw a presentation on this at the end of last year about this from [the Director of UKCRC] it was a bit like a drug company pitch, it had this sort of spin feel about it." (Senior academic general practitioner, Head of Department)

a) The tale of the NICE guidance and the industry executives

The documentary trail regarding the influence and impact of the pharmaceutical industry appeared quite straightforward[122]. As issues related to competitiveness and global markets were raised in consecutive New Labour policy documents, so the competitiveness of the pharmaceutical industry came increasingly to the fore. This was heightened by developments in wider health policy - including the development of NICE and HTA, as well as SDO[123] - that marked the beginning of a response to wider government issues. For instance, *Bioscience 2015* (DTI, 2003a) drew attention to potential end-market problems due to these new organisational structures:

> "The creation of NICE, a health technology assessment agency, appears to many as one more barrier to market access – particularly for small companies selling potentially expensive biotech drugs." (page 21)

NICE challenged the traditional power of the pharmaceutical industry by reviewing the acceptance of newly developed products within the NHS prescribing budget[124]. In 1999, the first technology appraisal of the drug Relenza ended with a recommendation that it was not for NHS use, causing anxiety within the pharmaceutical industry that, in turn, sought to influence the course of events:

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[122] I am not suggesting that the influence of the pharmaceutical industry began at this time, but that its influence in shaping the discourses described in chapters 7 and 8 in particular has emerged from here. Indeed, one interviewee involved in the development of the first NHS R&D strategy referred to the inclusion of the pharmaceutical industry right from the start as absolutely crucial. Hence, initiatives such as a funders forum developed in the mid 1990's have facilitated discussion across stakeholders, including industry.

[123] Refer to Appendix 2 for further information on these initiatives.

[124] According to ABPI (2004), their companies manufacture over 80% of the medicines prescribed by the NHS.

> "Now actually that turned out to be a blessing in disguise because it infuriated Tom McKilop, the Chief Executive of Astra-Zeneca, Richard Sykes, who was then Chief Executive and Chairman of Glaxo Welcome, and Jan Leischly who was then Chief Executive of Smith Kline and Beecham....and because they were the three big UK based pharmaceutical companies they demanded - and of course got - an interview with the Prime Minister. You know, if you get the three biggest from the pharmaceutical industry saying 'we want to see you', it's very difficult for the Prime Minister to say no actually! [laughs] So that's what happened because they were very concerned, I mean they realised, you know, that Relenza was not, but they saw it potentially as the thin end of a wedge, or for, you know, 'is this going to make the UK a very difficult place to work?' Anyway, Tony Blair is a very shrewd politician, I mean, and you know he did the classic politician's 'get these people off my back approach' and set up a task force called PICTF, which started in April 2000 with a one year remit to report back to him on the competitiveness of the pharmaceutical industry in the United Kingdom." (Senior representative, UK pharmaceutical industry)

This clearly demonstrated the perceived influence of the pharmaceutical industry and links with the power base of central government. The result was the Pharmaceutical Industry Competitiveness Task Force, set up to explore partnerships across industry, government and the NHS and ensure appropriate action relating to central science and innovation strategy and to maintaining competitiveness of the industry. The exact terms of reference were described as follows:

> "The Pharmaceutical Industry Competitiveness Task Force will bring together the expertise and experience of the industry leaders in the UK with Government policymakers to identify and report to the Prime Minister on the steps that may need to be taken to retain and strengthen the competitiveness of the UK business environment for the innovative pharmaceutical industry." (DH, 2001f: 5)

The reference to the Prime Minister in this (and the previous) extract emphasised the considerable weight carried by the PICTF initiative, the government legitimacy given to this course of action and the influence of corporate discourses in relation to central government health and research policy. This suggested an increasing influence of high-level government administration on the realm of health-related R&D. This was embodied in the very first paragraph of PICTF, the Prime Ministers foreword:

> "A successful pharmaceutical industry is a prime example of what is needed in a successful knowledge economy. We must work together to ensure that the future of the UK pharmaceutical industry is even brighter. A key feature in maintaining the UK's attractiveness will be effective partnership at the highest levels between Government and industry. I look forward to future partnership..." (PICTF foreword, p1)

This was framed, not in terms of collaboration, cooperation, alliance or association, but as partnership. It implied equal access in terms of power relations and reaffirmed the influence of industry at the highest levels (which was actively encouraged). Although access to such high level politics may well be beneficial in terms of an ultimate contribution to health improvement, not only are specific benefits never discussed in these terms, but this level of access appeared to be denied to other groups. I refer in particular to discussion in the main body of text regarding the lack of access to the top table by primary care research (see page 171).

The economic issues associated with 'UK plc' and the power and influence of the pharmaceutical industry were sustained via annual reporting (that benchmarks, assesses and reviews the UK's position) and actively feeding into practice/s associated with research policy[125].

b) Changing public-private relations

Relationships between different sectors of industry and government, the public and universities captured a tension between corporate discourses and those of social welfare (see chapter 9). This reflected a potential incompatibility between a commercial sector driven to develop and exploit knowledge for profit in the private domain and other institutions primarily concerned with producing knowledge in the public domain for public benefit (Stoneman 1999). Framing in economic terms along with the lack of explicit discussion regarding social benefits and ethical or moral implications suggested that the increased influence of corporate discourses in research might result in the production of private knowledge for shareholder benefit[126].

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[125] Corporate discourses find voice via membership of the within the *Research for Patient Benefit* Working Party, UK Clinical Research Collaborative and new managed research networks, the Ministerial Industry Strategy Group and other groups; that all facilitate contribution to and shaping of the policy agenda. The importance placed on MISG by industry was suggested through exploring where references to it occurred within texts: in interview texts it was raised only by the pharmaceutical industry representative (this was also my last interview and I did not therefore have the opportunity to ask other representatives – none of whom raised it independently - if they are aware of the group); and within policy texts it is recommended by PICTF (as a means of continuing industry-government relations resulting from the PICTF process) and in the governments response to the House of Lords Select Committee report on the influence of the pharmaceutical industry.

[126] The government response to the recent House of Lords report on the influence of the pharmaceutical industry reinforced this: it went against recommendations made by the House of Lords to place coordination of the relationship with industry with the DH - not the DTI - thereby aligning the roles of promoting health and representing the interests of the pharmaceutical industry in the same department. The government acknowledged that this may appear to *not* serve the interests of the public as it should but, it argued that the interests of patients and industry are not exclusive and hence this arrangement would facilitate patient benefits via innovative medicines.

There have been a number of changes to explicitly encourage better industry-government-university relations[127]. In particular, government policy has sought to align academia more closely with dominant discourses through emphasising the role of universities in relation to economic growth (including, for instance, the production of an appropriate and sustainable workforce to ensure scientific knowledge production and transfer). This represented a reformation of the academic endeavour in corporate, as opposed to purely intellectual, terms; and was embodied in the review of business-university collaboration published by the Treasury in December 2003. Commonly known as the *Lambert Review* this framed successful university work in terms of business collaborations and contributions to the UK economy:

> "Universities will have to get better at identifying their areas of competitive strength in research." (page 2)

The language of competition used did not relate to grants or access to funding more broadly, but was framed by the wider report in terms of economic competitiveness and value. This was reinforced through wider institutional and government support. For instance a DTI White Paper required that universities:

> "...match excellence in research and teaching with innovation and imagination in commercialising research. To do that they will need the skills and the infrastructure to translate science into products, services and marketable commodities." (Secretary of State for Trade and Industry, 2000: 27)

This draws heavily on the language of economy and the corporate world, emphasising the commercialisation of research activities and the role of research policy in promoting this. It represented a significant cultural shift for those involved in academic primary care research as new collaborations were expected to more closely fit with corporate discourses. Focusing now on the impact on primary care research, I draw on the following interview extract from a senior non-clinical academic:

> "...in all the years I've done research – which is an awful lot now – I have never taken drug company money and one of the main reasons for that is, you know, if I've got a paper in the BMJ that says, you know, "funded by Pfizer" people are going to think "Oh yeah!" Whereas now the pressure is on us from Sally Davies[128] that 10% of our activity should be commercially

[127] In wider health policy this was reflected within, for instance, the NHS Plan (DH, 2000c) that referred to a historical standoff between public and private health care provision, characterised by ideological and institutional boundaries. It proposed an end to this in order to harness the capacity of private and voluntary providers.

[128] DH Director of Research and Development from Autumn 2004.

> funded. And the, the belief, the vision that they have is, you know, the UK could be one of the leading environments for medical research and if we do lots of stuff to help the drug companies do their research then they'll stay in the UK and they'll be profitable and that'll create more jobs. And that is sort of quite a culture shift for people like me who are academics rather than, you know, the GPs might be used to dealing with the drug companies and things but for me, having my first negotiations with Pfizer and all the time thinking 'well, do I really want to do this?' And then I try and employ staff to do a project which is actually a project that is a research question that is very important that we answer and could benefit a hell of a lot of people but actually the people I start saying 'right, I'd like you to be a Research Fellow on this trial for me' and they say 'I'm not working for a drug company'. And I think that's a challenge for us if that policy, if policy continues to move in that way."

It is clear from this extract that an increased influence of corporate discourses impacts directly on primary care research and presents challenges in the context of academic work. However, rather than being a collaborative endeavour, the data suggested that universities were being 'brought into the fold', being encouraged via incentives (see page 219) to work effectively within dominant discursive frameworks and new R&D structures. This was captured by the pharmaceutical industry representative in considering recent policy changes:

> "...I think with this UKCRC structure and with this NHS incentives working group within it, I think this whole issue of bringing universities in is really being done now."

There was little recognition within documents of any potential tensions wrought by an ideological shift in public-private research relations or the dominance of corporate discourses[129].

i) Is academic primary care a lost cause?[130]

There was no mention of academic departments of primary care in this context: universities were largely presented as homogenous academic enterprises. Attempts by academic primary care to find a policy voice were encapsulated in *New Century New Challenges*, an attempt by the Heads of Departments of academic primary care to reflect on past and future challenges. However, only one interviewee (also the SAPC representative), referred to this report. It failed to gain the attention of those concerned

[129] Consideration of such tensions only appeared in relation to the system of research assessment for universities that worked against wide collaborations with business and drew attention away from applied research primary care.

[130] This title is borrowed from a high profile editorial in The Lancet in 2003 that publicly challenged the very basis of primary care research as an academic discipline. I have used it here to emphasise the influence of wider discourses on primary care research.

with health-related research policy, not least as content largely focused inwardly to primary care, as opposed to drawing on dominant discourses and assessing alignment and/or resistance to these. *New Century New Challenges* stood in contrast to documents such as those produced by the Academy of Medical Sciences[131] that were highly focused, highly influential, fit with dominant discursive frameworks and were often cited in support of policy texts.

The selection of research priorities and collaborations within academic settings appeared to be encouraged by government on particular terms and via micro economic reforms designed to encourage academic and corporate liaisons and with a particular slant on economically viable scientific knowledge. This worked against primary care research that, as described earlier, has struggled to produce what dominant policy discourse considered scientifically and economically productive knowledge.

8.6 New Research Collaboratives

I finish this chapter by elucidating on new collaborative arrangements for clinical research embodied in the development of the UKCRC (refer to Box 10 on page 136) and the consultation on a revised NHS R&D Strategy represented in *Best Research, Best Health* (refer to Box 14); and reflect on what these might mean in light of previous discussion. Box 14 is particularly important in this respect as it draws attention not only to current practice/s within research policy (related to primary care research in particular) but also suggests alternative interpretations.

I have already described the importance of wider texts[132] in feeding into *Research for Patient Benefit* and developing a consensus on the type of network arrangements for clinical research that were supported from 2004. This was reinforced via a range of government documents[133] (and related policy initiatives) that all recommended and/or supported the development of UKCRC. This web of policy documents was shaped by the dominant discourses and supported particular institutions (for instance; clinical, corporate, governmental). Interview texts supported this and there were a whole range

[131] The AMS was set up in 1998 to provide an intellectual focus for the medical sciences – bringing doctors and scientists together - to try to influence relevant policy. It has been active in lobbying central government in relation to medical and clinical careers since this time.

[132] From the Bioscience Innovation and Growth Team and the Academy of Medical Sciences in particular.

[133] Including the government response to the report from the Biosciences Innovation and Growth Team, the report of the Pharmaceutical Industry Competitiveness Task Force, Budget statements and Best Research Best Health.

of extracts on which I might have drawn to demonstrate this further. I have chosen the following because, in a concise paragraph, it captured global and economic discourses and introduced the role of industry and corporate discourses in sustaining this in the context of UKCRC:

> "And all of those reports have come up essentially with the same conclusions and that led essentially to UKCRC happening with government backing, I mean, you know, it's a lot of money, 100 million pounds, and I think you know the future, if we get UKCRC right – its not right yet – but if we get UKCRC right then potentially the UK, their vision is that the UK is the most important place in the world to do clinical research. Well, I don't personally think, I think that's a bit *too* far, but from an industry point of view what we are saying is that it should be the place in the world where all companies will want to do, they will want a significant UK arm in all their pivotal trials." (Senior representative, UK pharmaceutical industry)

Box 14: Alternative views on developing research infrastructure

The following points are drawn from *Best Research, Best Health*: a Department of Health consultation on the NHS R&D Strategy undertaken in August 2005. I provide a brief overview of some of the key points relevant to primary care research, along with alternative interpretations of how infrastructure might develop…

(1) New proposals for **funding research** suggested that money follow the patient. This might severely disadvantage those areas of research activity that do not directly involve patients, including health services research. An alternative view might highlight the variability of health research, the difficulties in identifying fixed costs per patient and the need to consider funding for different types of research in different contexts.

(2) Similarly, proposals included the development of **leadership funding** with a particular emphasis on clinical trials. By allocating funds according to patient intervention, patient tissue and patient data this might severely disadvantage biomedical and health services research.

(3) The new concept of **Academic Medical Centres** was limited to "*the nation's premier research hospitals*". This was not only restrictive, but also out of line with wider policy to move care out of hospitals. Alternative approaches might include greater emphasis on the importance of research across all NHS sectors and aligned with a range of DH funded facilities that are not based around health providers.

(4) The explicit emphasis within the strategy document was on the **clinical building blocks** for NHS research. There was little mention throughout of the vital contribution of non-clinical health research/ers. A different perspective might provide greater recognition of the multidisciplinary nature of much healthcare research that is vital for delivering the applied research agenda.

a) NHS as a test bed for research

I have already suggested that the apparent increased influence of corporate discourse/s had an impact on primary care research. This was evident in discussing UKCRC where,

as the key component of the NHS, primary care was situated as a clinical test bed for industry:

> "McKinsey's have just completed a report for the UKCRC on unique selling points for the United Kingdom, and one of the key USPs is the NHS. The NHS is essentially primary care, really I mean secondary care survives on the primary care system, and it's the ability to potentially, I mean I say potentially it will happen, is to be able to follow patients from cradle to grave. Now, we're supposed to have been able to have done that for a long time, but it just ain't possible, [laughing] it doesn't work, but it will happen." (Senior representative, UK pharmaceutical industry)[134]

This draws heavily on the language of marketing to situate primary care as the unique selling point – or USP - of UK clinical research. In addition, rather than discussing primary care research *per se*, both this and other government texts referred to research *on* primary care. In this way primary care was positioned as an economic and marketing resource, facilitating the recruitment of patients to clinical trials within the new infrastructure (this was also evident in the examples provided in Box 14).

Whereas the overall development of UKCRC/N invoked communicative discourses; strategic discourses oriented to getting results were employed in relation to how the primary care system facilitated clinical research. I raised this with the pharmaceutical representative who was keen to dispel any suggestion that primary care research was omitted from the policy process. To counter this he then employed strategic discourse to emphasis the importance of the *system* of primary care, as opposed to research undertaken within this setting:

> "...the one thing that is almost a jewel in the crown as far as the industry is concerned for the United Kingdom is the primary care set-up." (Pharmaceutical Industry representative)

He went on to describe this 'system' as increasing the feasibility of UK clinical research, particularly alongside wider government investment in infrastructure such as information technology and electronic patients records. In this way, new collaborative arrangements allocated a supporting role to primary care research largely involving recruitment of patients to clinical trials.

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[134] The report he referred to is *Clinical Research in the UK: Towards a single system that reliably delivers distinctive quality and rapid access at reasonable cost*, published by UKCRC subsequent to the interview in January 2006.

b) The Construction of clinical scientists

The development of new research collaboratives led to an emphasis on clinical research that not only shaped the work undertaken but also who does it:

> "But we're in that space now - and this is very important for primary care - we're in that space now where we are trying to create networks and support mechanisms in some relatively well understood areas but on the way towards trying to create generic structures which would support anybody who wanted to do an important clinical trial in anything." (Senior DH policymaker, research policy development)

Although this extract suggests a certain breadth in research infrastructure by developing generic networks, the final sentence reframed this to clinical work. Although clinical research was undeniably important in the world of health, this focus undoubtedly benefited some to the exclusion others. In particular, it negated the breadth of health-related research activity associated with primary care research. As a result, certain groups benefited from the application of, or access to, dominant clinical discourses as opposed to others: leading roles were assigned to clinical scientists involved in the production and transfer of scientific and technological knowledge that was considered economically viable. This was reliant on ideologically based notions of what makes worthwhile knowledge and the production an appropriate workforce in support of this.

i) A workforce fit for purpose: clinical and scientific skills training

The development of a global knowledge-based economy had huge implications for research and for skills development. Education therefore appeared as increasingly instrumental within policy documents in terms of ensuring a workforce 'fit for purpose'. Workforce development and career pathways were defined in terms that supported clinical scientists. In this way workforce planning choreographed workforce infrastructure to reproduce dominant power relations.

The scene was set within early government documents that focused on building up the science base and attendant skills and workforce[135], the emphasis being on shaping education policy and ensuring the labour market supplies:

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[135] Documents which specifically addressed this or had skills development as a major focus were numerous but included: *Realising Our Potential: A Strategy for Science, Engineering and Technology* (Chancellor of the Duchy of Lancaster, 1993); *Our Competitive Future: Building a Knowledge Driven Economy* (DTI, 1998); *Creating Knowledge Creating Wealth* (Baker, 1999); *Excellence and Opportunity: Science and Innovation Policy for the 21st Century* (DTI, 2000) *Cross-Cutting Review of Science and Research* (HM Treasury, 2002), *The Future of Higher Education* (Secretary of State for Education and Skills, 2003); *Innovation Report* (DTI, 2003b); *Lambert Review of Business-University Collaboration*

> "...science and technology graduates, and people with technical skills to work in the new jobs created in the knowledge economy." (Secretary of State for Trade and Industry, 2000: 32)[136].

This is not new: the move towards a global, knowledge-based economy has been some time in the making and workforce planning considered (and shaped) accordingly. However, the concerted and co-ordinated push within health-related research for an increased focus on clinical sciences and scientists is fairly recent. For instance, *Realising Our Potential* (Chancellor of the Duchy of Lancaster 1993) hardly mentioned health or medicine throughout, nor did it consider the clinical research pathways needed for development in this area. Instead it focused on a broader conceptualisation of science, which although it supposed to draw on "a whole range of human endeavour" (such as medical, cultural, social and intellectual), actually specified areas such as mathematical modelling, biotechnology and earths observation from space; biomedical sciences; particle physics and space-based astronomy. Furthermore, whereas science and technology mission statements were provided for Government departments related to education, industry and employment, the Department of Health was subsumed within a mission statement for all other departments and was thereby not identified as having a specific role in relation to science and technology. A change in language and emphasis began to be seen with an alignment between science, economy, technology and globalisation instigated via New Labour policies. In addition, the Academy of Medical Sciences was integral in influencing the development of UKCRC and related clinical research infrastructure and investment and growth across clinical activities, such as the biosciences[137]. Clinical work appeared to embrace both medical and clinical worlds and draw together dominant discourses associated with scientific and technological work. This, in turn, shifted medical discourse into a different realm, allowing policy to capture new elements of biological or pharmacological development and reshaping the science workforce.

General practice and supporting roles

By positioning clinical scientists in the foreground, other roles disappeared into the background. For instance, non-clinicians tended to be constructed in relation to clinical

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(HM Treasury, 2003); *Science and Innovation Investment Framework 2004-2014* (HM Treasury, 2004a) *Science and innovation: working towards a ten-year investment framework* (HM Treasury, 2004b).

[136] Although this document does discuss skill mix, it only does so on one occasion.

[137] This was also reflected in other documents such as *Bioscience 2015* and *Research for Patient Benefit* and in subsequent developments such as UKCRC and associated initiatives on researcher careers.

and scientific knowledge production (for instance, in relation to biotechnology, biochemistry, bacteriology, medical physics)[138]. This had the consequence of reinforcing the view of academic general practice and the DH (see pages 168 to 170) of general practice as the 'strong man' of primary care research. Other areas of primary care research undertaken by other professional groups were positioned as less important:

> "...but if we value research which prevents limbs from being cut off more than the research that says what's the best way of organising a clinic, then, you know, one side is going to appear more important than the other. I think both are of equal importance but progress in the fight against disease and death and destruction, that still remains the major goal for most clinical researchers." (Senior academic general practitioner, NHS organisation)

This extract is significant as it uses rhetoric to situate different types of research as more beneficial or important than others. Extreme and complex examples are invoked to justify this position with the language of amputation, death and destruction placed against the image of 'clinic organisation' in which 'hard' clinical activities are implicitly central and 'soft' supporting activities are implicitly marginal to achieving health gain[139]. This resonated with conceptualisations of scientific colonisation – here scientific, clinical work was placed in an imperial role, able to progress *the fight*, win the battle against disease. This was countered by the personal view that different types of research were of equal importance[140], but this is rebuffed by depicting the goal of most clinical researchers to give weight to the argument. In doing so, the text positioned both non-clinicians and non-clinical work as less important.

Non-clinical actors situated within primary care research were acknowledged only in terms of needing to ensure capacity for research activity (though the reasoning for this and how this related to the type of scientific, technological or innovative activity

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[138] The interchangeable use of medical and clinical language often made it difficult to explore which groups or institutions were being supported and which not. For instance, although the title of the most recent report on *Medically- and dentally-qualified academic staff: Recommendations for training the researchers and educators of the future Modernising Medical Careers* (Modernising Medical Careers & UK Clinical Research Collaborative 2005) clearly situated itself within a medical framework, the content of the document referred to clinical training, academic medical careers, medical students or clinical academic trainees.

[139] There is, of course, substantial literature to suggest that this is far from the case. See for example the literature on structured care for diabetes which illustrates improvements in mortality rates of comparable magnitude to those achieved with new drugs.

[140] It is impossible to tell exactly why this was said. However, it might be worth bearing in mind that I was interviewing an academic general practitioner as a non-clinician involved in this type of work; we have known each other through work for several years and were both aware of the others interests and experience.

emphasised within the main body of documents was rarely considered). This was reinforced through the UKCRC work stream on building up the research workforce: having first reported on training medically- and dentally-qualified researchers[141], subsequent phases of work were to focus on nursing, professions allied to medicine and non-clinicians, suggesting a hierarchy of priorities.

c) Clinical research work

This recent emphasis on clinical research was not simply concerned with clinical scientists, but also clinical trials. As has already been suggested, this approach to knowledge production was conceived as enabling scientific and economic competitiveness on a global scale, with several documents reinforcing an explicit focus on clinical trials as the only means of ensuring knowledge-based decision making and rapid access of patients to effective therapies[142]. The subsequent establishment of UKCRC and disease-based research networks (see Box 10 on page 136) reinforced and sustained this model by explicitly aiming to facilitate large multi-centre clinical trials and increase recruitment of patients.

Although clinical trials, clinical effectiveness, service delivery and organisation and preventative and public health research were all included under the gamut of applied research; key reports issued from the DH regarding long term strategy and policy[143] tended to focus on the model of clinical trials. As a result, primary care research was redefined in line with the dominant discourses shaping knowledge production and in support of this model. The following extract draws attention to the perceived lack of co-ordinated clinical trials activity within the primary care system and by the DH, hence the need to situate it within clinical research networks to facilitate this type of research activity:

> "So all of those things will need to be thought through as to how that's managed. What we wanted is to dissolve the current PCTs in their current form and reform them into new units with a new set of objectives which are largely the objectives of the UKCRC and through that the UKCRN - so these will become UKCRN networks..." (Senior DH policymaker, research capacity building)

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[141] This was in conjunction with Modernising Medical Careers (part of the NHS).

[142] See the AMS report on *Strengthening Clinical Research* (2003) in particular, but also the *Biosciences 2015* (DTI, 2003a) and *Research for Patient Benefit* (DH, 2004b).

[143] See for instance the *Science and Innovation Strategy* (DH, 2001b), *Research for Patient Benefit* (DH, 2004b) or *Best Research for Best Health* (DH, 2005a).

8.7 Summary

In this chapter I have presented findings that describe a complex web of inter-related and shifting discourses around science, economy, globalisation, technology, innovation and industry. I have predominantly considered changes over the last thirty years and presented analyses relating to how such discourses have shaped and influenced policy relating to primary care research. I have described the transition from post-second world war industrial activity to a focus on scientific knowledge production that has situated research as a viable, economically productive, knowledge-based activity and one deserving of government policy. I have drawn attention to the election of New Labour in 1997 as an important time in the formation of a series of policy initiatives and reviews that further facilitated the discursive construction of science (and scientists) and combined this with an emphasis on global and economic considerations (not least in relation to shifting public-private relations). Lastly, I have focused predominantly on recent health-related research policy to describe how strategic discourses have been employed to (re)position primary care research as an economic and marketing resource for new clinical research collaboratives.

9

SOCIAL BENEFIT

9.1 Introduction

The previous two chapters have demonstrated how the language of science and economy pervaded the texts studied. Hence, when making sense of the data, I tended to identify subtler discourses associated with social welfare of patients and the public, as minor storylines (or even non-storylines)[144] within policy documents. This chapter therefore explores these discourses in more depth; considers how and why they were (or were not) drawn upon and how this positioned patients and the public in relation to health-related research policy. I considered including this within the previous chapter to draw attention to the means by which social and ethical discourses associated with health-related research appear to be foregrounded by global, corporate, economic and scientific discourses. I choose *not* to do this in order to ensure representation of the discourses associated with social benefit in their own right. Hence, whilst this chapter draws attention to 'silences' in the data, it is also necessarily shorter in length than previous findings chapters reflecting the lack of space given to such discourses within the texts studied.

9.2 Constructing the social benefits of health-related research

Whereas considerable detail was provided within policy documents relating to economic benefits, national wealth creation, potential benefits for specific groups or organisations, the development of the UK economy, and the potential for increased competitiveness and innovation, very little space or depth was given to the social benefits of the growth of research (beyond the implicit benefits assumed to be associated with economic growth). One powerful linguistic resource used to convey this

[144] This relates to the data extraction form in Appendix 4 that facilitated identification of storylines that were not present but that one might expect to find given the context or focus of the document at hand.

across several documents from the late-1990s and early 2000s was 'UK plc'. For instance, this was used four times within *Bioscience 2015* (DTI, 2003a), immediately conveying interwoven notions of a corporate identity; global competition; and economic practices. This invoked a particular view of the UK as a unified economic entity, making use of borrowed business language to uncritically embody corporate values. In relation to interview texts, little detail was provided overall about social benefits and only one DH representative referred to 'United Kingdom plc'.

Where documents referred to both social and economic benefits of research investment in the world of science and technology, these were usually broad statements, for instance:

> "...the Government can act now and in coming years to create the capacity to develop, absorb and apply knowledge to deliver innovation, growth and improvements in public services wherever the opportunities present themselves." (HM Treasury, 2004b: 10)

No other information was generally provided. This suggested an implicit assumption of public benefit from economic investment and was conveyed using rhetorical devices, such as 'expert validation', that indicated broadly conceived benefits rather than translating these into realistic, tangible, actionable and measurable recommendations (as with more economically-oriented benefits). The explicit nature of social benefits therefore had an air of mystery, remaining unexplained.

Returning to the example of *Bioscience 2015* (DTI, 2003a), this was evident in that the report drew attention to the economic benefits of growth within the sector as including a 'healthier population'; however, no breakdown was provided as to the potential health gains for different groups of those currently sick, disabled or at risk. The language used suggested a joint venture to benefit patients and the public, as well as industry and economy. However, although specific examples were invoked to convey ideas of health benefit, when it came to areas of the report such as the terms of reference or recommendations – areas that arguably shape ensuing action - the focus was almost entirely on innovation, wealth creation and economic growth. For instance, one example early in the report referred to the potential for recombinant treatment for foot ulcers, arguing that although expensive there was potential to reduce the cost of care and

improve health when combined with appropriate ulcer nursing[145]. This example was used within the report to demonstrate the potential of bioscience to improve health, as well as the economics of preventative medicine and treatment of illness. However, it stands in contrast to studies cited elsewhere regarding the preventability of foot ulcers in diabetic patients (National Institute for Clinical Effectiveness 2004) that, in turn, points to alternative solutions beyond the boundaries of the bioscience discourse. Other examples drawn directly from the report and citing patient benefit or improved health are provided in Box 15: although several examples are provided these remained vague throughout as to precise health gains and stood in contrast to the detail provided in other areas of the 128 page report.

Box 15: Examples of patient benefit drawn from Bioscience 2015

"Increasing participation in clinical trials will also play a crucial part in modernising the delivery of healthcare, as protocol driven care improves both patient outcomes and the skills of healthcare professionals." (page 9)

"Bioscience also has the potential to improve the quality of life of an ageing population." (page 11)

"Patient benefits:
• Improves patient outcomes by using modern protocol-based care.
• Provides earlier and easier access to drugs, including those that treat rare diseases.
• Provides treatments that improve cost of delivery and keeps patients out of hospital and in work.
• Acts as a sustainable driving force to modernise the health services in the UK and provides a source of continuous innovation in healthcare provision.
• Provides cutting edge learning for health professionals involved in conducting trials in a protocol-driven environment." (page 36)

"Achieving this vision will significantly improve patient care, by enabling the NHS to develop and test innovative therapies. It should also deliver better economic outcomes for all parties. There will be better use of taxpayer money in the NHS, with a focus on, and earlier access to, the most effective therapies and improved health economics with better patient outcomes." (page 39)

"...the introduction of novel therapeutic approaches can lead to improved outcomes." (page 54)

"The real prize, from a patient and an industry perspective, is to implement this system, and other accelerators of the drug development and approval process, across the larger market of the EU." (page 57)

[145] This cited one study reported at a Nordic Health Economists Study Group Meeting and defined improved health in terms of more healthy months and fewer amputations. It can be found on page 11 of the report.

The discourse of bioscience was presented as indisputably good, with little mention of ethical or moral issues beyond the need to manage risk and develop regulatory frameworks. This was not exclusive to this particular document: others were similarly framed, drawing attention to the potential of science and technology for economic growth and negating in-depth consideration of wider social issues[146].

9.3 Public as confident consumers

Texts were framed in such a way as to encourage public understanding within the boundaries of dominant discourses, as opposed to generating informed and open debate and understanding around wider ethical, social, emotional or spiritual issues. Past mistakes and controversial scientific areas such as BSE, GM foods and the mapping of the human genome were acknowledged within policy documents indicating that public acceptance of new scientific developments was not taken for granted. For instance, the *Science and Innovation Strategy* states:

> "The Department of Health is also considering ways of making further improvements, following publication of the BSE Inquiry (Phillips) Report and Guidelines 2000, particularly in the areas of openness, communicating with the public, risk management, handling scientific uncertainty and application of the precautionary principle." (2001e: 32)

However, recommendations tended to focus on generating greater public confidence in science (to facilitate consumption of science) and communicating risks and benefits of new products (to facilitate scientific advance). This appeared to focus on a technological and curative approach as opposed to prevention or protection. In this way the role of modern government was also constructed in terms of exploiting modern scientific developments for a consensual, homogenous and consumerist public.

This was reinforced via policy documents that emerged from the DTI and Treasury in the late 1990s and early 2000s that emphasised the need to develop and access large integrated affluent markets[147].

[146] For instance, refer to the most recent Wanless Report (2006) on the care of older people that was not commissioned by government (as previously) but by the King's Fund. It attempted to shift the debate away from science and technology *per se* and lobbies for fairness and justice in older age; and recommended that personal care and other services that enhance wellbeing and social inclusion should be free at the point of delivery.

[147] The assumption being that the larger and deeper the integration of a given economic area, the greater the chances of spurring productivity and profitability in that area.

> "All innovation will only succeed if it is desired and accepted by consumers and the public. That is why creating markets for innovative products is as vital as investing in basic research." (Secretary of State for Trade and Industry, 2000: 1/15)

An institutional discourse of advertising is used here to position the public in the role of consumer, realising the benefits of new products within the global commodity system. Indeed, *Excellence and Opportunity* carried an entire chapter entitled 'Confident Consumers' that discussed the active role that consumers play throughout the innovation process in order to ensure that new products are successful (i.e. consumed). In this way, involvement was constructed as product consumption.

Focusing now on health-related research policy, the *Science and Innovation Strategy* (DH, 2001e) discussed involving users and patients in the process of identifying research priorities[148]. However, it drew largely on project related examples; did not consider involvement in terms of setting the science or research agenda at programme or policy levels (beyond inclusion within advisory bodies); and did little to openly debate ethical and moral issues in relation to discussions on, for instance, biotechnology. The Strategy did however emphasise patient and public rights, health and safety and regulatory issues and acknowledged the need to communicate and involve the public. However, this was framed in specific terms of risk assessment, the *Research Governance Framework* (DH, 2001a), handling of confidential patient information (focused on epidemiology and genetic information) and increased 'consumer involvement'. For instance, one of the four goals of the Strategy related to ensuring that:

> "...the rights, health, and safety of the public and patients are protected and their interests reflected." (page 4)

This was to be achieved primarily through addressing four priorities:

> "...to develop approaches to risk assessment in collaboration with other Government departments; to introduce and implement a Research Governance Framework for health and social care; to improve the framework for handling confidential patient information; and to increase the involvement of consumers in the research and scientific advisory systems." (page 5)

[148] Referring specifically to work undertaken in the NHS Service Delivery and Organisation and Health Technology Assessment programmes.

More detailed discussion on clinical safety focused on gene transfer and embryology which, though important, was only one model that framed safety largely within the confines of dominant scientific and medical discourses. In this way, patients and the public were framed as unquestioning and willing participants benefiting from the consumption of scientific and technological production. Meaningful involvement was sidelined or rhetorically constructed as a non-issue (or non-storyline). In addition, the emphasis on markets and consumerism enhanced the pre-existing tension between the social welfare model of patient benefit and public involvement; and the economic model that is focused on rational self-interest and consumption (see for instance, pages 178 to 180).

9.4 Patient benefit in clinical trials

The use of rhetorical devices across texts facilitated the construction of a particular, ideological view of health and research and policy, which gave little emphasis to ethical and moral dimensions. I draw on the example of an increased focus on clinical trials methods to demonstrate this more clearly.

Clinical trials were constructed across many policy documents and interviews as the key means of improving health and wealth. In some senses this was undeniable: that a more flexible, coherent and accessible clinical trials infrastructure may lead to increased clinical trial activity, which in turn may lead to improved health and wealth. This was the view supported throughout documents from 2000 onwards; for instance, *Bioscience 2015* (2003a) stated that:

> "Increasing participation in clinical trials will also play a crucial part in modernising the delivery of healthcare, as protocol driven care improves both patient outcomes and the skills of healthcare professionals" (page 9)

> "The challenge of patient recruitment into clinical trials will only increase with the advent of 'personalised medicine'. Companies will develop drugs targeted at better categorised diseases, and at patients with a specific genetic profile. They will also need efficient ways of rapidly locating and monitoring those people." (page 20)

These extracts were significant as they construct clinical trials in light of other issues such as evidence-based practice, the use of protocols, drug development and genetic profiling and presented this as the most effective means of treating all patients. There was no acknowledgement, for instance, of the need for clinical judgement, for patient input to decision making; of alternative models of healthcare delivery such as shared

decision making; or of the way in which the agenda for which trials get funded might be driven by commercial (as opposed to health) interests (see chapter 8, particularly pages 174 to 180). Related to this was the construction of recruitment as a simple, process issue: clinical trials participation was presented as unproblematic, with willing patients being recruited to an expanding clinical research endeavour[149]. Little consideration was given to, for instance, the potential for increased risks that this might entail; any public concerns over research activity; or to ethical, moral and cost dimensions associated with increased production of hi-tech solutions to health-related problems[150].

The construction of clinical trials as the most natural infrastructure for research called into question the multi-method foundations of primary care research which was characterised, not only by randomised controlled trials, but also epidemiology, cohort studies, qualitative methods, and research synthesis[151]. This replicates the hierarchy of evidence constructed via a particular (and contested) conception of evidence-based medicine described in Chapter 2 (see pages 27 to 29 in particular).

9.5 Public health and primary care

I have shown that, despite the use of the health-wealth dichotomy, the emphasis placed on wealth creation within policy far outweighs that of delivering specific health improvements. Documents such as the *Science and Innovation Strategy* discussed the need for a programme of changes to:

> "...produce fairer, faster services that deliver better health and quality of life and tackle inequalities." (DH, 2001e: 3)

These were described as being encompassed elsewhere[152] with little information provided as to how this was to be achieved. Elsewhere this public health agenda was sidelined entirely. For instance, *Bioscience 2015* put forward the view that to ensure faster access to innovative healthcare for patients there are only *two* priorities for the UK:

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[149] This related specifically to the texts studied. Elsewhere considerable material is available around issues of, for instance, informed consent.

[150] For instance, via individually tailored genetic responses to clinical problems.

[151] Refer to Appendix 2 for further discussion on this, particularly the section on 'Early influences on general practice, primary care and research' (page 304) and Table A2 (page 305) describing the varied work of research pioneers in the area.

[152] For instance, in the NHS Plan, Our Healthier Nation and Social Care White Papers that also drove policy, service priorities and research priorities of the time.

> "Continue to build a strong domestic bioscience sector, which has a vested interest in improving UK healthcare; [and]...Create a healthcare system receptive to innovation that encourages both domestic and foreign bioscience companies to trial and market their products in the UK." (DTI, 2003a: 14)

Whilst such priorities may well be positively received, the rhetorical construction[153] of the document refutes the possibility of other priorities such as the reduction of inequalities in access or addressing health inequalities more broadly.

Saving Lives: Our Healthier Nation (Secretary of State for Health 1999) was a key document in raising the profile of a broad public health agenda: it adopted an explicitly holistic, socio-environmental model of the determinants of health. Although this and the earlier Green Paper (Secretary of State for Health 1998) used New Labour rhetoric to describe a 'third way' of tackling the problems of ill health, it did so within an explicitly holistic framework that sought to address personal, social, environmental and economic factors and promote good health and was informed by wide-ranging population-based data. These White and Green Papers appeared to sit on the sidelines of health policy with few links to other documents either historically or ideologically: very few subsequent documents followed a similarly holistic path with most focusing on diseases and their immediate antecedents[154] that was, similarly, a characteristic of health-related research policy. One recent exception was the Wanless Report, commissioned by the Treasury to examine future health trends and long-term resource requirements (Wanless 2002). The report took a very different approach, comparing three possible scenarios over the subsequent 20 years (to 2022) and taking into consideration future levels of public engagement with health; demographic changes and life expectancy; the inextricable link between health and social care; effective use of resources; workforce development and capacity issues; and all within a broad framework of catching up with and sustaining best practice. Although this built on the existing *NHS Plan* (DH, 2000c) and National Service Frameworks, it did adopt a novel approach and one removed from the more common disease orientation.

Public health practice has recently been aligned with primary care (Department of Health 2001b) placing both disciplines in a strong position of understanding,

[153] Via, for instance, the use of narrative to convey particular priorities or views (see Box 3 on page 52), as opposed to others.

[154] The recent *Choosing Health* White Paper (DH, 2004c) does have a health promotion focus but is individualistic in nature and unlikely to impact on health inequalities (see Scott-Samuel, *Labour isn't working*; Public Health News October 17 2005 for a short but relevant discussion on this).

communicating with, and identifying and addressing the needs of patients and the public. Indeed, the strength of primary care research in particular lies in considering the needs and problems of patients, set in the context of their everyday lives, rather than disease and organs alone (Society of Academic Primary Care 2002). But this contact with patients and the public and the value of understanding the social and psychological dimensions of health were not widely recognised within the policy documents studied. By this means, elements such as the doctor- or nurse-patient relationship and the patients' active role in their own health, were positioned as less important to health improvement than the economically productive scientific (and scientistic) discoveries referred to above.

9.6 Summary

In contrast to previous findings chapters, this has focused on discourses associated with social benefit of patients and the public in order to elucidate less dominant discourses and explore the reasoning for this. I have drawn attention to the limited explanation and explication given to wider social (dis)benefits associated with health-related research and contrasted this with the earlier emphasis on the development of the UK economy and national wealth creation. To more clearly illustrate this I have explored the use of the language of consumerism to construct particular messages across policy texts; drawn attention to the uncritical acceptance of a growth in clinical trials; and shown how the emphasis on wealth creation has drawn attention away from the wider public health agenda.

* 10 *

'CONTROLLING' RESEARCH

10.1 Introduction

This chapter explores government control of health-related research via the policy process and subsequent practices by employing the concept of governmentality: a practice of social control embodying the machinery of government by individuals and professions (Foucault 1986; 1994; Pels 2000) (see pages 98 to 99 for further detail). Governmentality is the strategy and rationale that has dominated political power in England since the eighteenth century. As the feudal system dissolved, the administrative state began to emerge based on a belief that laws relating to the social and natural worlds could be discovered and followed. Governments' sought to bring the disorder of industrial and social change under control, using the emerging science of probability and statistics as a means of calculating the norm and identifying, and seeking to control or punish, deviations from it (Lupton 1999).

In this chapter I explore governmentality in relation to the modern world of healthcare research. I investigate approaches to scientific management and their influence on research policy, focusing particularly on new managerialism[155] and the tools and practices that have been developed to govern research in the context of primary care. In particular I draw on policy relating to innovation in, and regulation of, healthcare research. As necessary I present an historical picture, but direct readers to the previous three chapters for more detail relating to social and political change throughout the past century or more.

[155]Also known as New Public Management (NPM) and characterised as neo-Taylorian, neo-liberal and target or performance driven (Parsons 1995; Pollitt 1993; Power 1997).

10.2 The rise of scientific management of research

The ideological foundations of scientific management can be traced back at least to the Enlightenment's social engineering model of society. They are manifest in classical management theory of the late 19th century (Pinder et al. 2005) and the principles of taylorism, a form of scientific management espoused in the early twentieth century emphasising economy and efficiency (Taylor 1911).

In this climate, it is surprising that the 1918 Haldane Report recognised the political nature of the production of policy and recommended the separation of research from specific government functions (Lord Haldane 1918) (see pages 139 to 141). Although this vision has never been fully taken up, the principle of separation persisted for more than half a century until the 1970's when Lord Rothschild denied its existence. The *Rothschild Report* and the government response to it were published at a time of economic crisis when the search for new forms of economic organisation led to a greater emphasis on technical processes and political intervention. Research was openly debated as a legitimate area for bureaucratic control[156].

Rothschild sought to separate out research from politics and introduce concepts of accountability, competition and efficiency. He recommended a separation between purchasers and providers - what came to be known as the customer/contractor principle - and a new emphasis on accountability and transparency. His report made use of terse, businesslike language to attack what were regarded as unsatisfactory arrangements surrounding applied research. He placed accountability with the customer who was to be responsible for deciding what research programmes were required, priorities between programmes and how much should be spent. He drew on a traditional conceptualisation of technology transfer (see Figure 5 on page 141) to suggest that, whereas applied research required a customer/contractor arrangement, any similar arrangement for basic research would be inappropriate. Hence, the split between different research practices, their management and organisational location was reinforced further:

[156] The Rothschild Report (1971) represented a culmination of a number of years of debate regarding the Research Councils' expenditure on basic science at the expense of solving practical problems. The government had been exploring accountability, with all Ministers reviewing the functions of their departments to ensure that responsibility and accountability were clearly defined and allocated. Treasury officials had begun to question the science 'vote', its exponential increase and its practical achievements in terms of the economy. There was also disquiet over the policy of letting scientists identify research problems and approach the MRC for funding.

> "No system of administration and prosecution of applied research and development will work efficiently and successfully without a continuing dialogue between the customer, the Chief Scientist, the Controller of research and development and those concerned with the actual prosecution of research and development. In an efficient and successful organization all those concerned act and behave as a team in spite of formal accountabilities. Without the accountabilities however both efficiency and the probability of success are reduced." (page 9)

This administrative separation was largely supported in the subsequent White Paper (Lord Privy Seal, 1972). The Government accepted the customer/contractor principle and agreed to transfer 25% of the MRC budget back to the DHSS 'customer' in support of this (Cabinet Office 1972)[157]. Within a short space of time the independent nature of government-contracted research was realigned and assumed to rest within specific administrative divisions. This drew strength from an emerging marketing discourse that encouraged a customer orientation. The emphasis on applied research also shifted power and knowledge away from curiosity-driven scientists to government customers.

Such arrangements demonstrated a profound lack of understanding of the social and political nature of commissioning, undertaking and responding to research. This was manifest in a number of ways. For instance, Research Liaison Groups were formed in the mid-1970's based on Rothschild's basic concept: in applied research the customer says what they want, the contractor does it and the customer pays (McLachlan 1985). RLGs aimed to link civil service administrators (the customers) with a new Research Division. Few were successful due to a lack of research experience and understanding and a focus on wider political pressures that diverted attention away from research ideas. At a time when more co-ordinated research was needed, the mechanism for supporting it had precisely the opposite effect becoming both bureaucratic and cumbersome (McLachlan 1985). Attempts to develop a more scientific approach to research were thwarted by insufficient coordination, inefficient management structures and lack of administrative authority[158]. This stood in stark contrast to the supposed rational objectivity and scientific management of research and policy.

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[157] The White Paper preserved the Research Councils but accepted Lord Dainton's suggestion of a Board to advise the Department of Education and Science on the priorities of the science 'vote'. After many years of lobbying, the funds removed from the MRC were reinstated in 1980. See Stokes (1997, page 117) for a short description of these events.

[158] McLachlan (1985) reported that by the end of 1974 Sir Douglas Black, the then Chief Scientist Officer, was attempting to foster research activity in the DHSS with a staff of two individuals, a research committee structure inherited from his predecessor, no executive power in terms of the use and disposal of research funds, DHSS Medical Officers responsible for research administration who were responsible

a) New managerialism

The election of the conservative government in 1979 ushered in an era of political and administrative practices associated with new managerialism or New Public Management. Led by Prime Minister Thatcher, the government embodied a strategy to reduce public expenditure, 'roll back the state' and increase the efficiency of the public sector through neo-liberal, free market ideology: the contemporary language of governmentality (Lupton 1999). Throughout the 1980's the conservative government continued to place great faith in the private sector model regulated by market mechanisms and its wholesale transfer to the public sector. The search for economic growth and efficiency was combined with pressure on firms to obtain ever-greater profits and productivity from the workforce (refer back to previous chapter). This approach manifest in healthcare via the *NHS Management Inquiry* (1983) – also known as the Griffiths reforms – and in a series of government initiatives and papers such as *Working for Patients* (Secretary of State for Health 1989). Together these recommended the transfer of private sector models to the NHS[159]. An internal market was created and new layers of management introduced, including a senior-level NHS Management Board.

At this stage, there appeared little consideration of the potential of healthcare research to be more firmly rooted within these reforms. The Nuffield Hospitals Trust reported on priorities for health service research in 1985, specifically aiming this at the new NHS Management Board to encourage a deliberate policy of investment in new research arrangements. The Trust argued that the Griffiths reorganisation provided an opportunity for research and intelligence to be built into the foundations of decision making via the Management Board (McLachlan 1985). Thy called attention to the idea that:

> "...no management can ignore basic research and enquiry: the prerequisites for information and intelligence, without which no business – public or private – can operate effectively." (page 4)

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to another individual; and an atmosphere in the DHSS that was focused on solving day-to-day, service related problems.

[159] For instance, *Working for Patients* advocated elements of competition and markets in order to better respond to 'identified needs'; formulation of some management structures along business lines including the introduction of executive and non-executive directors; and new self-governing status of hospitals as NHS Trusts.

Such calls were not immediately heeded. However, inevitably, the reforms provided a new basis, not only for the organisation of services related to healthcare but also, eventually, healthcare research. In 1993, the first review of science policy was undertaken since Rothschild. Publication of the review in *Realising Our Potential* (Chancellor of the Duchy of Lancaster 1993) captured the language of governmentality by emphasising a laissez faire approach to devising organisational structures by which individual freedoms were seen to flourish:

> "The purpose of the changes set out in this White Paper is to give a clearer sense of the vital national contribution made by the ideas, inspiration and dedication of our science and engineering communities, and to devise organisational structures in which the individual can flourish...." (page 7)

The review reaffirmed the Rothschild legacy and the traditional conception of basic research as an exploitable means of wealth creation and applied research as potentially failing to produce exploitable outcomes[160]. The text emphasised the role of the customer and introduced discourses of commercialisation and marketing by seeking to accelerate the operation of market forces, particularly in relation to applied research. Particular focus was placed on the commercial viability of industry related research, reinforcing earlier findings relating to the influence of economic and corporate discourses in shaping research policy.

This introduction of market ideology to research, via the internal market reforms, was perceived as enabling an effective and efficient service for customers (i.e. Government Departments) through panoply of public and private suppliers. Different ownership models for research establishments were recommended (Chancellor of the Duchy of Lancaster 1993), explicitly introducing discourses of privatisation and rationalisation as a means for future development.

i) Healthcare research

The appointment of the DRD and the production of an NHS R&D Strategy in 1991 marked a period of increased governmentality over health-related research. Although there had been a pre-existing relationship between government and science, this represented a critical time when healthcare research came formally within the remit of

[160] Readers should note that the document did not aim to separate out basic researchers from those concerned with application of findings but did emphasise the conceptualisation of research continuum with basic and applied at opposite ends.

policy administration and bureaucratic politics[161]. It therefore embodied the technical processes and management ideologies of the time. This led to a reshaping, not only of what *can* and *cannot* be researched, but also of *how* to research. Research developed via pre-specified NHS R&D programmes to secure knowledge transfer in particular forms (for instance, via initiatives like the Cochrane Collaboration that placed great emphasis on systematic reviews) and via newly constructed institutions with new managerial roles (such as Health Technology Assessment and NHS Regional R&D Offices):

> "So, NICE and the health technology assessment and Cochrane, all about evidence and also about knowledge transfer, it's a very powerful way of transferring knowledge to produce advisory guidelines on how you should, what drugs you should use, etcetera..." (Senior academic, senior DH policymaker and strategist)

In line with the developing internal market ideology, this enabled a strategic focus on research, thereby creating a hurdle to alternative legitimate forms of knowledge. Indeed, the same interviewee continued, describing alternative means of securing ideas and practical experience for development and change within the health service that, they argued, the NHS has not been able to do. He therefore continued:

> "I would certainly invest in more than the kind of NICE and everything that surrounds it, into this area of *innovation* in health care, and the uses of anything, including experience, but also research, to develop new ideas." (Senior academic, senior DH policymaker and strategist)

But the *Peckham Report* from 1991 did not contain the language of new managerialism. Indeed, interviewees referred to this whole period as a time of both strategy and creativity. What became clear shortly after publication was that there was ineffective means of delivering the strategy[162]. As the representative from the pharmaceutical industry pointed out: this led to further policy work to more closely manage research and to begin to develop systems to allow for greater national coordination. The DRD appointed Professor Anthony Culyer (already a member of the DH Central Research Committee) to independently review the situation and make recommendations accordingly. One senior DH policymaker indicated that, as an economist, Professor Culyer adopted the perspective of financial policy solver and was concerned to address piecemeal funding and management; a view supported by other interviewees who referred to the subsequent report and its implementation as strongly associated with

[161] In the same way as science and healthcare more broadly became subject to policy.
[162] For instance, there were problems with the Service Increment for Teaching and Research (SIFTR) and the general R&D allocation lacked transparency.

managing economic efficiency, having been driven by funding flows, management systems and healthcare economies:

> "The strategic issue was trying to cost everything, and clearly it was initially instigated by Tony Culyer's report saying research was at risk and if we wanted to protect it we had to cost it precisely. My judgement is that it's had entirely the opposite effect. It is difficult because clearly there have been clinical pressures to tie clinicians down and account for their time, and therefore they are increasingly unwilling to do things informally..." (Senior academic general practitioner, regional primary care)

This draws attention to wider policies and technologies that have sought to increase accountability of clinicians, such as disease-oriented, evidence-based guidelines; the standards associated with clinical governance, and disease specific care pathways. These capture a linearity of thinking and codification of knowledge that has led to a loss of judgement within the clinical encounter and increased auditing of clinical practices: a kind of neo-Taylorist measurement of 'time and motion' in modern healthcare settings. This has transformed clinical work and impacted on healthcare research. As one senior GP academic noted, whether the Culyer report was the cause or symptomatic of this it is impossible to know. However, given that policy builds on what has gone before, it is unlikely that Culyer was the cause *per se,* but instead represented the convergence of pre-existing discourses in different ways and with associated practices.

ii) Loss of professional values

The emergence of primary care research - and indeed other areas of healthcare research - was fuelled by reflection and engagement in a search to develop and maintain *professional* values. The governmentality embodied in and through Culyer was contrary to this, embodying a different set of *managerial* values. This tension between different sets of values was captured by one GP academic, reflecting on the workings of a past clinical trial:

> "And *they* (general practitioners) did it because they wanted to improve clinical practice in the UK and *we* (researchers) did it and there was a strong professional agreement that we were doing this, we were putting energy into this because we thought it was right. And we've lost and destroyed that. So now when I go to the general practitioners they say 'I'm terribly sorry but we've got to cost this completely and we can't do it unless you give us the money'." (Senior academic general practitioner, regional primary care)

The association with economic discourses was undeniable: whereas professional values appeared beyond price, those associated with managerialism came at a financial cost.

According to this GP Academic, the shift away from professional values caused a major problem in setting up and paying for such work. Discourses of economy and bureaucracy became paramount: further development of financial incentives for research, founded in managerial values, may heighten this further (see page 219).

In 1988, the House of Lords Select Committee on Science and Technology drew attention to the knock-for-knock principle whereby costs incurred by medical schools and the NHS participating in research were deemed to be offset by the benefits received. This arrangement was clearly under strain at that time, but the principle was deemed important. A neo-Taylorist approach was not considered feasible or practicable:

> "...it will never be practice for [those] funded by the UGC[163] and [those] funded by the NHS to account to each other for every moment of staff time." (page 35)

The same Committee reflected on research infrastructure changes seven years later (1995). They expressed great regret for, what was by then, the complete erosion of the principle of uncosted mutual support as a result of the internal market. Rather than suggesting a beneficial means of improving health and wealth, as per the aims of the *Peckham Report* (DH, 1991), the Committee suggested that the sum of the disaggregated parts of the research funding system might do less for the health of the nation than did the whole.

b) Audit technologies

Although transformation might have been expected with the appointment of New Labour into government in 1997, there has in fact been a continuation and extension of indirect control through new managerial practices. This has come in the form of new audit technologies that suggest a more permanent and profound system of governmentality.

With the rise of new managerialism, audit became divorced from its financial meaning and became associated with a cluster of other terms and meanings (Power 1997; Shore & Wright 2000). This cluster included performance and performance management, assessment and accreditation, transparency and accountability, quality assurance and control, efficiency and effectiveness. This was evident in the early policy texts produced

[163] University Grants Committee, now known as the Higher Education Funding Council.

by the Department of Health under New Labour. *A First Class Service: Quality in the NHS* (DH 1998) built on managerial values conceived by the conservatives and proposed development of new standards in order to provide quality services. This included a series of new institutions – such as NICE and the Commission for Health Improvement - and subsequent auditing tools such as the National Service Frameworks which enabled a standard of clinical care to be calculated, measured against and controlled. The approach drew on market and quasi-market mechanisms (as opposed to traditional forms of hierarchical bureaucracy) and the language was that of targets, standards, performance frameworks, quality initiatives and spot checks: part of the cluster of new terms and meanings. This was intended as a programme of modernisation across healthcare[164] and hence in 2000, the government incorporated this new language within healthcare research, reconstructing funding principles and practices in line with managerial values and auditing practices (Department of Health 2000b).

Research and Development for a First Class Service described itself as a statement of policy and principles on behalf of the Secretary of State for Health and announced the allocation and management of NHS R&D funding in line with two new streams: Priorities and Needs Funding (PNF) and Support for Science (SfS)[165]. The title quite clearly links this document to one previously published by the DH in 1998 - *A First Class Service: Quality in the New NHS* - that described the government's plans for modernising the NHS in their image. The subsequent document relating to R&D drew on many of the same themes and discursive elements. For the first time within a health-related research policy document (across all the documents studied), I found considerable space dedicated to the policy context and its influence on proposed changes. The document represented a crucial time in bringing discourses associated with modernisation and research more closely together and positioning NHS R&D in line with government bureaucracy. The discourse of modernisation was used to emphasise the need for research to become more closely tied in with the work of the NHS: to target money into perceived strategic priorities within the 'new NHS' and ensure active management systems (described as, for instance, performance management or quality improvement) were in place to guide and reward practices that achieved in these terms. In this way research was constructed as an ideological activity supporting a particular set of practice/s (over others):

[164] It was reinforced through, for instance, *The New NHS – Modern, Dependable* (1997) and *The NHS Plan* (2000), along with subsequent implementation plans.
[165] Refer to footnote 22 on page 318 for a description of these funding streams.

> "NHS Priorities and Needs R&D Funding will support R&D required to underpin modernisation and quality improvement in the NHS. Priorities addressed will reflect the National Priorities Guidance, National Service Frameworks and the National Performance Assessment Framework, and the work of the National Institute for Clinical Excellence. NHS needs outside service priority areas will receive due attention and will reflect consultation with NHS users and staff." (page 6)

Although the benefits of research activity in the areas described may well be beneficial; the document does nothing to acknowledge that other areas might also benefit or that it was possible to identify other priorities and needs via alternative means. It does this within the wider context of policy discourses promoting scientific innovation and technological transfer and promoting 'UK plc' (see chapter 8).

Of further relevance to the development of audit technologies was the promise of standardisation within *Research and Development for a First Class Service* (DH 2000b). This was not only in relation to funding streams – the explicit focus of the document – but also in relation to health-related research generally. The document drew attention to the development of quality frameworks for research; the use of indicators of performance (for instance, based on outcomes, outputs and indicators of timely delivery that suggested the direction of knowledge production to particular needs); and new governance structures to guide research practices (that I come on to describe below).

i) Research assessment

Managerial practices did not simply appear from nowhere: in line with the rise of new managerialism there was a gathering trend to measure and monitor research activity. For instance, the 1988 Education Reform Act embodied many of these changes including new powers of central control over universities and a narrow view of what accountability, performance, public relevance and quality represented within academic research. It led to the development of the Research Assessment Exercise[166] that represented a diminution of academic tenure and introduction of new systems for assessing university research that would have profound influence on primary care research. The RAE was presented as rational, objective and neutral, but revolved around normative statements and measurements that were used to construct evaluative goals. The system of assessment promoted a norm of research that, through a process of internalisation, primary care has then sought to match. However, although primary care

[166] Refer to Appendix 2 for a brief overview of the RAE.

research has sought to continuously improve itself in line with these norms, the RAE and initiatives like it had the perverse effect of hiding primary care research. Research has been categorised in such a way that primary care has not always been a defined area for submission and assessment but has had to submit within other areas such as population science or community health. This is illustrated by one senior GP academic:

> "...the RAE is unquestionably no matter how you slice it focused on biomedicine, yet you have to survive, and quite a lot of people now are losing their identities as general practice / primary care researchers and research departments are being put into divisions of health services research or population sciences or something to make the RAE return better, you know, to hide weaknesses and the rest of it... I think that's had some adverse affects because funding up until recently has tended to fog over the laboratory base and more basic if you like medical sciences and it's been more difficult to get money for applied research." (Senior academic general practitioner, SAPC representative)

This process has forced primary care research/ers to respond to dominant audit technologies in particular ways. Not only has this hidden primary care research, but it has also contributed to the colonisation of primary care research that I referred to within Chapter 8 (see pages 157 to 159).

The Culyer reforms also brought the prospect of additional research assessment to inform the allocation of infrastructure funds. It was hoped that it might be possible to combine this new NHS based process with the RAE undertaken by HEFCE:

> "...if the creative thinkers in clinical departments are to have time to think, the two exercises must be integrated, and we do not believe that devising means of doing so is beyond the wit of the two great Departments of State responsible." (House of Lords Select Committee on Science and Technology, 1995:27)

Despite this criticism two separate systems emerged, suggesting the pervasive authority of bureaucratic discourses. The development and use of such audit technologies reflects a trend towards increased measurement providing the means by which research productivity is surveyed and directed and particular forms of knowledge labelled as worthwhile. Other initiatives that have developed in recent years include the use of bibliometrics described earlier (see page 152); the Research Governance Framework (discussed below in relation to regulation); and Better Metrics (National Director of Research & Development 2005), a group of standards specifically developed to monitor research infrastructure within NHS organisations. Specific to primary care, the RCGP

has developed a system of standards and criteria to assess primary care research activities based in general practice (Carter, Shaw & Macfarlane 2002), which was funded and supported by the DH[167]. This was cited by the Department of Health in considering core research-related competencies and activities specifically aimed at those within primary care (Department of Health 2000b).

ii) Corporatism

The recent promotion of managerialist ideology and audit technologies has reflected a much greater emphasis on the entrepreneurial role of the state (Power 1997). In particular, it appears that this approach to audit and quality assurance is associated with the language of corporatism, for instance through improving efficiency and increasing productivity. This corporatism was reflected in the 1985 Jarratt Report on efficiency in universities that recommended universities introduce the language of new managerialism (cited in Wilkie, 1991). This positioned universities first and foremost as corporate enterprises, a fact that was reinforced through the technologies of the RAE that sought to more closely align academic and corporate principles. This has since been sustained and facilitated by the Dearing Report (1996) which led to establishment of additional auditing institutions with a focus on university activities (for instance, the Quality Assurance Agency); and similarly through the recent Lambert Review (HM Treasury, 2003) (see previous chapter). This was not limited to universities alone, for instance, *Realising Our Potential* (and many subsequent documents from the DTI[168]) emphasised governments priorities of competitive wealth creation, closer links between business and science and better responsiveness to 'consumer' groups.

c) The role of management ideology in directing current research

The extent to which research is currently managed suggests a system of governmentality that is woven into the fabric of primary care research. The *Science and Innovation Strategy* (DH 2001e) emphasised that research funded by the Department was actively managed via, for instance, industry liaison officers, programme management teams, interim reporting, and advisory group committees. In addition, new

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[167] At the time of writing the scheme – Primary Care Research Team Assessment - is changing to align itself with the new collaborative research networks discussed earlier (see pages 181 to 184). My own position is also relevant here: I have been a member of the PCRTA Management Group since its inception in 2001 and, prior to this contributed to the development and evaluation of a pilot scheme.

[168] See, for instance, *Excellence and opportunity: a science and innovation policy for the 21st century* (2000) or *Innovation Report. Competing in the global economy: the innovation challenge* (2003).

managed research networks[169] represented a significant shift in government commitment to developing partnerships with the private sector (HM Treasury 2004a). This embodied the changing nature of government-industry-university relationships, the need for a significant increase in business investment in UK R&D to drive innovation and the development of the science base (HM Treasury 2004a); changes in the way in which intellectual property was conceived and managed[170]; and newly conceived means of enhancing links between universities and business (Chancellor of the Exchequer 2004; Department of Trade and Industry 2003b; HM Treasury 2003). Active management strategies to address these were embodied in proposals for UKCRC/N. This new management model was seen as the means of exploiting and commercialising the potential of the NHS as a unique test bed for clinical research.

As primary care research is economically unviable (see pages 164 to 174) and considered through the lens of strategic discourses; survival is to be found only through incorporation within these new managed structures. Primary care *must* change to fit with these new structures in order to survive:

> "...the fact of life now is that *without* this change primary care will lose its support....It's not either/or fundamentally...It's a new scheme that can be shown to chime with UKCRC and UKCRN or no scheme." (Senior DH policymaker, research capacity building)[171]

Being absorbed within these new structures equates to being governed by dominant discourses. Reconstructing discourses around diseases may have the potential affect of changing power relations however, although this might be welcome in challenging traditional professional and organisational silos, it also creates its own way of working focused on disease orientation and denying the breadth of primary care:

> "I think there is a risk for those clinical collaboratives to be developed along sort of disease lines. So we've got cancer, diabetes, and da de da; things that primary care and nursing in fact may well be interested in, or public health, are often sort of issues which may be cross-cutting and not actually fit within one particular disease group.... but maybe, you know, research or research questions about managing those clinical issues around workforce...might need to be done in a cross-cutting way rather than down a silo route. (Senior academic nurse)

[169] Co-ordinated via the new UK Clinical Research Network.
[170] For instance, *Excellence and Opportunity* (2000) in particular identified the need for more effective IP management by universities and public sector research establishments.
[171] Readers should note that this interview was undertaken prior to the announcement by the Department of Health in November 2004 to launch a new Primary Care Research Network for England (PCRN-E), due to formally begin from October 2006.

Whereas this academic nursing representative had concerns about re-creating silos, one DH representative contrasted this with a much more positive *pitch and spin*[172] on the dissolution of professional networks. They regarded the new managed research infrastructure as facilitating dissolution of silos *per se*, as opposed to the potential for reformation in line with dominant discourses. This suggested a tension between management and professional and/or academic values.

i) Downgrading primary care research

The restructuring of research into disease-based networks drew attention to a downgrading of specialist primary care research expertise, such as recruitment activity[173]. Following omission of primary care research in the original conception of these new managed networks (DH 2004b), there was some recognition of this by government representatives who acknowledged the need for a primary care research network with a cross cutting function:

> "...there's a realisation now that it probably wasn't a very clever idea to have a cancer, a cardiovascular disease, a diabetes and so on networks, and that what we perhaps should have had was a generic clinical research network." (Senior DH policymaker, research capacity building)

This suggests that new partnerships might be more realistically shaped by including primary care research *within* communicative discourses (i.e. moving away from a focus on the instrumentality of the primary care system and acknowledging the contribution of primary care research to generically conceived clinical research, as well as providing greater attention to non-clinical contributions). Such recognition might represent a coming of age for primary care research – a sign of maturity and acceptance. However, at the time of writing it is unclear exactly what form a primary care research network will take and how this will relate to and work with disease-based networks. What has been made clear is that existing network infrastructure will need to change substantially and become realigned within UKCRN/C. This was announced by the Department of Health in November 2005 and drew attention to the key aim of the new network:

> "...to facilitate the conduct of clinical trials and other well-designed studies in primary care and at the interface with secondary/tertiary care.." (2005b: 1)

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[172] This was cited earlier to highlight links between government bureaucracy and corporate discourses. I use this phrase again to emphasise these links.

[173] One senior GP academic describes this as requiring 'good relations and attention to detail'.

The document cited referred to a number of changes to shift the organisation of multiple primary care research networks across England (with funding of £44 million) into up to eight new Local Research Networks within support up to £2 million.

ii) Is all research the same?

Aside from attempts to classify and define curiosity driven and problem-oriented activities, it appears that research was largely treated as the same within policy. This was evident, for instance, in the Rothschild report that conceptualised research in a uniform way and encouraged standardisation (Lord Privy Seal 1971). In many of the documents studied there was no recognition of the contingent nature of research; the influence of contexts, values, beliefs, motivations or measurement practices. Rothschild even includes a specific section on the "need for uniform terminology": recommending the same terminology be used across the same organisational structures, processes and contexts in order to ensure standardisation across policy administration. This represents a negation of the social practices inherent within language and, over 30 years later, may seem somewhat extreme. However there are similarities with recent policy: the model for modern disease-oriented networks being founded in the world of research related solely to cancer.

Cancer research as a model for clinical research

The National Cancer Research Network (NCRN) was created in April 2001. It aimed to improve the infrastructure within the NHS for clinical research in cancer and increase involvement and recruitment into trials through dedicated research networks. This was via a series of managed research networks that, in turn, offered a solution to the economic and scientific woes described in the previous chapter. The NCRN model was transported into the new UKCRN infrastructure that was seen to offer an efficient and cost-effective means of supporting and managing clinical research for the benefit of 'UK plc'. This was detailed across numerous documents with rhetorical language used to create a positive *pitch and spin* on the potential benefits to be reaped[174]. For instance, like many other documents in this era, the government response to *Bioscience 2015* (DTI 2003a) advocated transferring a science-based model of clinical research to different research areas to bring about coordination, networking, effective partnerships and common systems:

[174] See for instance *Research for Patient Benefit* (DH, 2004b) and the Chancellor's Budget speech of the same year.

> "These first research networks will operate in a co-ordinated fashion. Employing a common management structure with common processes and protocols, and a shared data capture system." (Departments of Health and Trade and Industry 2004: 6)

Once again, there was no acknowledgement of the contingent nature of research: this assumes that all research is the same, that common systems and networking processes are equally appropriate across research questions and settings. It failed to consider the complexities of wholesale transfer of one model dedicated to cancer to, initially, other disease specific arrangements and, subsequently, the primary care setting. Indeed no formal assessment of the cancer network model was undertaken, nor any exploration of the means by which this model might address the needs of other areas of health-related research:

> "...the cancer network is said to have delivered extremely well. It has, but if you look at it closely it isn't as clean and nice as it might look. It's delivered largely by units that were not otherwise involved, becoming involved. That's good. But some of the biggest units have actually shown the least change...So once again a piece of evidence was to some extent grabbed at its superficial level without any real depth of analysis, and said "look here's a wonderful model, we should replicate it." (Senior DH policymaker, research capacity building)

The reference to superficial evidence highlights a major tension within policy: that the government actively seeks effective, relevant and problem-oriented research on which decisions can be based, but is unwilling or unable to inform research policy in this way. As one senior academic and policymaker points out, the NHS SDO Programme has provided a focus for this kind of health systems research and been successful in many respects. However, priorities have never been explicitly identified to fully explore the organisational infrastructure for research policy. The lack of evaluation of clinical research networks embodied this.

iii) Technology and standardisation

It is clear that new technologies provide an important means to measure and assess research via technical processes (for instance, through the use of online data capture forms or the aforementioned electronic patient record). This facilitated new managerialism by utilising particular processes on particular terms to ensure research might be undertaken in particular ways. In relation to this, one senior DH policymaker began to discuss the means by which technologies might be used to standardise different

sources of data relating to the research process (such as application forms) and thereby ease research bureaucracy. Although commonsensical on some levels, this led into discussion about the influences on such development which were clearly situated within the following strategic aim:

> "...the sort of thing that I mean by a strategy, you know, is that the UK is the best place in the world for clinical research by 50 years' time..." (Senior DH policymaker, research policy development)

This suggested that the development of such (electronic) audit technologies are linked into higher policy discourses which then shape the resultant processes and practices.

It was surprising to find so little explicitly discussed about information technology within the texts studied. It was the pharmaceutical representative who drew my attention to the genesis of the National Programme for Information Technology (NpfIT)[175] and NHS Connecting for Health[176]; vehicles for delivering the governments' modernisation plans *and* facilitating managed research models. Information technologies provide the means to access electronic patient records and to make use of this for research purposes. Data protection issues aside, this raises a number of issues around the pervasive nature and impact of systems of governmentality. At the very least this might include concern over increased potential for surveillance and classification of population health; and increased reliance on technical processes and procedures as opposed to human interaction. This once again highlighted the strategic discourses at play by focusing on the effective use of the primary care system, as opposed to research *in* and *by* primary care. I would like to suggest that it is the relative lack of access to power and knowledge on the part of primary care research – compared to, for instance, that of the pharmaceutical industry who's representative drew my attention to this issue – that results in so little awareness and consideration of this in the context of research. However, there are a number of alternative explanations including lack of time in interviews to raise and discuss this, more pressing issues relating to primary care research; or a focus on electronic patients records in the context of the clinical setting (as opposed to implications for research).

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[175] An NHS-based programme with four main deliverables: development of electronic records; electronic appointment booking; electronic transmission of prescriptions; and an underpinning IT infrastructure. According to the DTI *Innovation Report* the programme is regarded as "a catalyst for innovation that will contribute to on-going modernisation of the NHS." (2003b: 88)

[176] Coordinating a national programme to bring modern computer systems into the NHS, including connecting over 30,000 GPs to almost 300 hospitals.

d) Risk and regulation

Neo-liberal approaches to government have encouraged a particular approach to social regulation and control that draws heavily on the construction, measurement and management of risk[177]. The idea that research practices have recently come to be regarded as 'riskier' has been prompted by a series of unfortunate events around fraud and misconduct[178] that have provided additional impetus for government intervention. By identifying a need to ensure regulation is in place to calculate and address such risks; this has fed into, and been sustained by, economic, global and scientific discourses described earlier (see Chapter 8), facilitating standardisation and easing the global (research) expansion.

Published in 2001, the *Research Governance Framework* drew on discourses of risk. It suggested that it is the researchers responsibility to ensure the conduct of the research and that if they ignore expert advice (for instance, from a research governance or ethics committee) they would be culpable. Research and researcher are positioned in a web of surveillance, monitoring, measurement and expert advice that requires constant work. A veritable panopticon of texts have been produced (and reproduced) to guide the researcher through the associated regulatory process. These include sources of advice and guidance; standards and criteria for assessment and audit, implementation plans; and notes of clarification and have been influenced by events beyond the geographical boundaries of the UK[179]. These are not simply innocuous legal rational forms of bureaucracy, but instruments for new forms of governance, regulation and control.

Risk represents a governmental strategy for regulatory power administered by a network of actors, institutions and practices. In relation to primary care research this is evident in the creation (and re-creation) of institutions and regulatory agencies concerned with assessing risk (such as PCT Research Management and Governance sites, the Central Office for Research Ethics Committees, and the national Patient Information Advisory Group); new actors and responsibilities (such as research governance managers and coordinators); and new tools and practices (such as research governance and research

[177] See Shaw and Barrett (2006) for a broad discussion of risk and regulation in the context of health-related research.

[178] Such as the removal and retention of organs for research purposes at Royal Liverpool Children's NHS Trust Alder Hey Hospital.

[179] For instance, the recent Clinical Trials Directive that came into effect from 1 May 2004 originated from an EU Directive facilitating administrative standardisation of good clinical practice in the conduct of clinical trials of medical products across member states.

ethics approval forms, and forms for providing annual reporting to regulatory agencies). This appeared to have combined with an ideological approach to the use of technology as a means of securing rationality.

i) Regulatory intervention

Relaxation of the 'burden of regulation' appeared a prerequisite for the stimulation of innovation as part of the globalisation of capitalist economies and for neo-liberal ideologies to flourish (particularly around the free movement of goods and services). Hence, the language of policy documents suggested intervention was needed to tailor regulation policies and help overcome particular barriers that might otherwise inhibit research growth in the UK. Such intervention was framed in terms of ensuring competitive costs for undertaking research (and development), a reduction of technical barriers to trade, and promotion of the acceptability of 'UK plc' as an attractive location for research investment/s. The influence in shaping regulatory functions was evident in the following extract from the *Science and Innovation Strategy*:

> "The Department's Medical Devices Agency (MDA), which regulates clinical trials on new devices in the UK, helps support the development of the industry. It has already hastened the approval process by allowing research ethics committee consideration and regulatory authority assessment to be concurrent. This has resulted in a significant increase in the number of trials now being undertaken in the UK, which provides a stimulus to international companies to locate more of their R&D activity in the UK. The MDA and Department of Health are also in regular dialogue with the Association of British Healthcare Industries (ABHI) to identify other issues in the control of clinical trials and support for research and technology transfer which could be improved." (DH, 2001e: 10)

This captures the influence of economic discourses in shaping regulation, but also the influence of corporate discourses and government bureaucracy in working together to change approvals processes and increase UK clinical trials activity. Similarly, this was captured in interview texts:

> "I think that certainly our government has given away too much to industry. Governance, the directives, these are all attempts by the government to appease the pharmaceutical industry so that they can conduct their phase one, two and three trials with greater ease. None of these things are particularly conducive to, you know, original research. Sure, they ostensibly set high standards and say that you shouldn't do things that are wrong or immoral...but on the whole these are all designed to create a machine that will help industry, and I certainly feel rather resentful about that although I accept the fact that industry does do a lot of original blue skies thinking." (Senior academic general practitioner, NHS organisation)

The explicit machine metaphor conjures images of a research production line, a manufacturing line for pharmaceutical research. Whereas the pharmaceutical industry representative discussed this in positive technical terms - where the influence of the corporate discourse on regulation opens up opportunities for economic growth - the view from academic general practice suggested that facilitation of corporate discourses might have negative or inequitable consequences for other areas of research. This suggested a tension in the values held across university-government-industry.

The extract above indicated acceptance of a set of standards on which all research might be based, whilst recognising the disproportionate emphasis on industry research in shaping the landscape of research and policy. From this perspective, what is important in policy texts also appeared to be what is *not* said about regulation: there is little explicit recognition that there is a world beyond the research activities of the pharmaceutical industry, a world where other research takes place and where the choreographing of clinical trials regulations impacts on other types of research activities.

10.3 Innovation

Innovation is a word that appears frequently within recent policy documents. It provided an important link between discourses of science, economy and globalisation with governmentality. Innovation is portrayed as a managed process for securing scientific and economic returns encouraging particular practices focused on technology transfer and not others. The DTI led a definitive strain of government innovation policy under recent conservative and labour governments. It has defined innovation in terms of:

> "...the successful exploitation of new ideas." (Chancellor of the Duchy of Lancaster, 1993: 11; DTI, 2003b: 8)

This definition draws substance from successive governments' conceptualisation of the development pipeline that adopts a linear approach to research from basic understanding to exploitation of ideas (see Figure 5 on page 141)[180]. Managed innovation is the means by which these ideas are not just available but are developed and utilised productively.

[180] This conception of innovation has been sustained and reinforced through a number of documents. Most recently this includes high level policy initiatives such as the White Paper *Excellence and Opportunity* (Secretary of State for Trade and Industry 2000), the Chancellor of the Exchequer's 2004 budget speech; and the consultation and report on the *Science and innovation investment framework 2004-14* (HM Treasury 2004a; 2004b).

It is a process supported by the triple helix model that assigns roles to each of university-government-industry to support elements of the innovation process (a simplified version might say, for instance, that universities make available basic research and work with industry to exploit this for commercial gain, with government *managing* the process through regulatory reform). The Treasury has also been active in explicitly linking science and innovation with economic policy:

> "Innovation is seen as an important determinant of economic growth in an era of market liberalisation, reductions in transport and communications costs and advances in science and technology." (HM Treasury, 2004a: 53)

The focus on specific areas of innovation - and links to discourses of science, technology and economy - has largely emerged from the DTI and culminated in a recent report dedicated to the topic: *The Innovation Report* (2003b). This emphasised the primacy of corporate discourses: innovation being explicitly identified as an industry issue with the innovation agenda across government directed through the Secretary of State for Trade and Industry. For instance, as no direct measures of innovation were available to government, the proxy measure adopted by the *Innovation Report* was technological innovation represented by business R&D and patenting; suggesting the influence of corporate discourses in shaping innovation and research.

The DTI set up nine Innovation and Growth Teams, one of which was dedicated to Biosciences. In a similar approach to the Foresight programme, these groups have a broad remit in terms of identifying key issues that will shape future industry and address how best the UK can respond to competitive challenges. The creation of these new institutional forms points to those areas considered to be on the policy agenda, to the potential exclusion of others. In this way areas of perceived scientific and global economic importance, such as biosciences, become key areas identified for growth and intervention by government. The economic un-viability and un-global nature of primary care research made it unlikely that it would be central to this process (see pages 164 to 174).

Within other policy documents, innovation was less clearly defined. The language of innovation appeared to be largely conceived in broad macro-technological and economic terms and with little emphasis on individual innovation. In exploring the use of rhetorical devices, there appeared a 'systematic vagueness' (see Box 3 on page 52) about what innovation really meant and how this relates to health and research. The

interpretation of innovation within the context of primary care research was even more tenuous.

This approach to 'managed innovation' suggested a particular *type* of research or scientific activity that was conceived as innovative. For instance, the *Science and Innovation Strategy* (DH, 2001e) framed innovation very much within a scientific realm, based around study and experimentation to develop and/or found new technological products to then exploit for intellectual property gains and health benefit. But innovation does not always need to be conceived in this way: it may also be thought of as a general or specific change; a plan or programme of modernisation; a mutation or addition or modification; a particular novelty or idea; or even a permutation, shift or variation. Indeed, rather than focusing on exploitation of *new* ideas[181], the following interview extract also drew attention to the importance of *existing* ideas:

> "People think that innovation's going to be the answer to everything, which it won't be. And sometimes it's actually doing what we've been doing for a long time but doing it better, which is much more important. So it seems to me to be a sort of slightly naïve enthusiasm for innovation and a slightly uncritical acceptance of innovation." (Senior academic general practitioner, regional primary care, strategist)

The reference to 'people' suggests a widespread (and uncritical) acceptance of the government conceptualisation of 'innovation' beyond the boundaries of government or industry. This suggested that the pervasiveness of the current meaning attached to innovation.

a) Innovation and incentives

The language of incentives has become increasingly evident as research has become subject to management ideology. This appeared linked to innovation whereby incentivising research was seen as a means of inducing a particular kind of knowledge production and the eventual successful exploitation of new ideas. A whole range of incentives has been discursively constructed to encourage clinical research activity within the UK[182], with an entire report on the topic generated by *Research for Patient*

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[181] This is the government's definition of innovation, cited above (see page 217).

[182] I have referred to many of these throughout Chapter 8, such as R&D tax credits to facilitate business investment or Knowledge Transfer Networks to facilitate the transfer of research findings from universities to industry.

Benefit (DH, 2004b) (see Annex C of the report) and a work stream subsequently dedicated to this area by the UKCRC.

Strategic discourses were apparent in the construction of research incentives for those within the primary care system. Recently, research incentives have been framed in terms of recruitment of patients into research and with a particular emphasis on trials (see Chapter 8). Although such research might be led from within the primary care setting, it was primarily described as the contribution of patients to clinical trials co-ordinated elsewhere (and via the new disease-oriented, managed research networks). This suggested that primary care was central to modern research in terms of provision of patients (as opposed to, for instance; ideas, increased understanding, economic return or health improvement).

One suggested means for incentivising was via the Quality and Outcomes Framework: a new contract for general practitioners through which they are able to increase financial reward through an agreed points system. Recruitment of patients into research was suggested as a new means of gaining additional points and thereby financial reward (DH 2004b)[183]. Such a scheme would relate solely to general practitioners, denying the research interests and activities of other clinicians and non-clinicians within primary care. This reinforced the tendency within policy to equate primary care with general practice and position others in supporting roles. It equated research and innovation in relation to corporate values and economic return, as opposed to professional values, societal benefits or altruism, thereby further reinforcing the influence of economic discourses in shaping research policy and activity.

10.4 Summary

This chapter has employed the theoretical concept of governmentality to explore the means of directing and controlling health-related research via policy processes and the impact on primary care research. It has drawn attention to the rise in scientific management and the impact on research policy, describing the means by which particular priorities or concerns have been addressed to the exclusion of others and with the result of focusing knowledge production on certain areas and not others. I have described associated practices and audit technologies that have emerged and developed to actively manage research along these lines (such as the Research Assessment

[183] At the time of writing this has not been implemented.

Exercise, regulatory interventions and requirements, approaches to accreditation, performance management and research governance). I have set this in the context of wider social and political relations, particularly in relation to the modernisation programme of the Labour Government elected to power in 1997; linked with earlier findings relating to scientific, technological and economic discourses in particular; and sought to elucidate this specifically in relation to primary care research.

* 11 *

PROCESS OF POLICY CONSTRUCTION

11.1 Introduction

It is impracticable to explore policy relating to primary care research *per se* without looking at what the process of policymaking actually involves or is perceived to involve. This final findings chapter therefore makes use of the broad framework for policy analysis grounded in social constructivism, described in chapters 4 and 5, to reflect on the means by which policy is constructed. It explores the tension between the perceived rational approach to policy often presented in documents and the messy and emergent process described by many interviewees; the means by which policy-related problems and solutions were constructed; and the representation of particular stakeholders within this process. In doing this, the chapter aims to more fully elucidate the means by which discourses are constructed, employed and sustained via such processes.

Although this chapter title refers to 'policy construction', this is set within a framework that takes policy to be a set of processes and actions (or inactions) that have some broad purpose and embraces both what is intended and what occurs as a result of that intention (see page 24). The focus is therefore not only on the words people set down but also on the 'doing'.

11.2 View from nowhere

Document extraction facilitated an appreciation of the varied, and often limited contextual information provided by policy documents, making it difficult to establish what each document was for, how and why problems were identified, why it was produced and by and for whom. In very few of the documents studied was there an explicit acknowledgement of who the document was aimed at *and* any individual or

specific department responsible for its production. Indeed, when organisational authorship was indicated this was not always fully explained: for instance although *Bioscience 2015* (DTI, 2004a) clearly indicated the BioIndustry Association and Departments of Health and of Trade and Industry on the front cover, it was unclear how these agencies came together in authoring the report and how they influenced content[184]. Recent changes in the format of government-produced policy documents such as a report information box[185] might by expected to facilitate presentation of such information however; this was only evident in two of documents studied since 2004[186].

Although explicit (or even implicit) terms of reference were often provided; little, if any, information was available as to the context of each document, the events preceding development and how or why it had emerged. For instance, focusing on the process for development of each document, in some cases the context was unambiguous due to the nature of the document[187]; but in the majority this was not the case. Similarly there was little information about whether a particular document might supersede another; or who the audience might be. This is not to suggest that each and every document should be prescriptive; indeed a range of documents was studied that appeared to have different purposes and audiences. However, with context often absent, the documents studied might be perceived as the 'view from nowhere' (see Table 1 on page 34).

a) Relevance of documents

The 'importance' of any document in terms of a specific focus on 'primary care research' appeared less relevant that the wider discursive context in which this was set[188]. Analysis suggested that wider policy and practice needed to be considered beyond the boundaries of documents identified as directly related to primary care research (such as the *Mant Report*). Indeed, having completed the data extraction form for the 29 policy documents selected (see Appendix 5), it became clear that one

[184] Further investigation beyond the content and investigation of the document revealed that the Bioscience Innovation and Growth Team that drew up the report was set up by the DTI who also funded the report.

[185] Including, for instance, a summary of information such as any relevant reference numbers; title and author; publication date; target audience and circulation list; brief description; any superseded documents; action required; timing; and contact details.

[186] It was not possible to tell whether this reflected a change in the policy process or in the widespread provision of information. However, the focus on recent documents hinted at influence of a move by government to 'modernise' policymaking (Cabinet Office, 1999a; 1999b) (see pages 228 to 229).

[187] For instance, a Government response to a report from the House of Lords Select Committee on Science and Technology that addressed each recommendation made by the Committee.

[188] This was perhaps unsurprising given that discourses only appear in fragments (refer to Parker's framework on page 73 and the description under *Discourse is realised in texts* on page 74).

sentence or paragraph in one document could be especially powerful or influential. For example, on page 155 I referred to the proposal instigated within *Excellence & Opportunity* for executive departments to develop science and innovation strategies:

> "All Government departments have a role to play in encouraging innovation, through the way they pursue their objectives, whether framing regulation, purchasing and delivering services, or managing and controlling risks. Collectively, Government departments spend £4.4billion a year on science and technology in support of their objectives. We are therefore asking departments to: publish science and innovation strategies, drawing on Foresight, and focusing on how they can maximise the potential of science and technology activities and how they can drive innovation." (Secretary of State for Trade and Industry, 2000: 41)

Read alone (and out of context), this may not appear significant. However, this paragraph (and the context in which it was set) was not only vital in providing an important space in which discourses around science, technology and innovation could come together, but also in framing subsequent policy and strategy *across* government and its executive departments. As I described in Chapter 8, this had a huge impact on the discourses constructed around research policy, including primary care research. It emphasised the political capacity of national institutions to steer policy and strategy, not only in relation to the areas under their jurisdiction (for instance, in ensuring technological capacity for global competitive trade); but also in relation to areas not directly within their jurisdiction or departmental domain (for instance, in relation to the strategic means by which primary care research was shaped in line with the transformation of science, technology and innovation).

b) Political capacity

The influence of some documents in shaping policy (for instance, the *Mant Report*[189]) stood in contrast to other documents that expounded the benefits of research or of primary care and yet had little impact on shaping government policy (for instance, *New Century New Challenges*[190]). This was relevant to primary care as it suggested that policy documents were not always sufficient in and of themselves to constitute policy, but need to be situated within a wider political context:

> "Well I think that reports in themselves don't make any difference unless they actually influence people who've got the power and the money." (Senior academic general practitioner, regional primary care)

[189] See earlier discussion on page 128.
[190] See '*Is academic primary care a lost cause?*' on page 180.

> "But if you say 'policy document' or a 'policy' we expect it to be a...unique descriptor that's a very narrow bandwidth, very you know, and they're not. We, people like me...write policy documents in a whole variety of different contexts for different purposes to achieve different ends; and sometimes, bizarre though it sounds, a policy document might be written that appears like it's to an external audience may be to convince internal audiences; or it may be written, although it sounds like the final definitive thing, it may be just sort of doing the next bit of ground so that you can win the next bit of ground, so you can eventually achieve what you want, and you won't have ever written a definitive document, you will have written six policy pieces that will have moved it on. And...you know, it's a daft thing to do to say 'I've written the perfect policy' and go away and implement it and I'll just watch it go pear-shaped, you know. So maybe that's the key sound bite that policy isn't complete until its been implemented. In other words, you don't really know what you're going to do until you've done it." (Senior DH policymaker, strategist).

Taken together, these extracts draw attention to the need for documents to be situated not only in relation to accessing people and resources but also in relation to other documents and the context in which they have developed.

Although the interviewees cited above were particularly articulate about the nature of policy, this was reflected in wider interview texts. In addition, others drew attention to policy being conveyed through other means. For instance, on page 135 I referred to the demise of NHS Executive Regional Offices as the enactment of a ministerial decision and without an identifiable documentary trail.

11.3 What is policy?

Whereas documents tended to present an ahistorical and decontextualised version of policy, interviews tended to portray a sense of messy emergence where policy and the political process unfold over time in unpredictable and often irrational ways. This is captured in Table 4, presenting an overview of how different stakeholders conceptualised research policy. It is drawn directly from interviewees; describes policy as they *described* it (as opposed to how they think it *should* be); and is intended as an overview of perspectives (as opposed to suggesting that all GPs, or all those in the DH, conceptualise policy in exactly the same way). Overall, all interviewees considered

Table 4: Interviewees' conceptualisations of policy

Description	No.	Research policy as...	Influenced by...	In order to...
General practice	7	Political and bureaucratic; tangled web of politics	Small group of HoDs with significant political influencing effect; targeted lobbying and contact with senior government players; access to relevant policy committees; subjective research experiences of policymakers; use of GP problem-solving skills	Have presence & representation; challenge and point out the consequences of decisions; ensure a mixed economy for research and bring to bear the intellectual input of primary care; develop an evidence-based culture
Department of Health	4	Negotiation & interaction; political; a balancing act; top down and bottom-up; emergent, tumbling out over time, always changing; at the mercy of central decisions and funding; problem solving; garnering political support for changes; not complete until its implemented	DH Director of R&D and senior civil service; range of professions and views, public involvement, lobbying bodies, individuals, policy advisors; organisational change and problems with resources, political embarrassment; risk analysis, option appraisal, feasibility; spurious precision	Manage power relations; manage different organisational objectives, boundaries and timelines; manage the health service, ensure effective use of resources
Non-medical*	2	Negotiation, balance between inclusivity and narrow focus, limited and behind closed doors; always changing	Medical power, individual academic GPs and SAPC/HoDs; advice from people who are perceived to be the great and the good	Maintain power and influence of small minority of GPs, secure a multidisciplinary outlook, change practice
Public	1	Made by the Department of Health, influenced by others; fast moving	Changes and needs of the Department of Health; the public, personal experiences	Ensure wide representation and involve the public
UK pharma-ceutical industry	1	Problem recognition, influencing political decision making and shaping the agenda	Individuals and committees; access to very senior government players; building and sustaining public-private relationships; identifying actionable areas	Bring stakeholders together, identify and address problem areas
No research policy experience	1	Prioritisation process for investment of NHS R&D; political; complex intervention; always changing	Evidence; wide range of opinions; what is politically acceptable; a general will to make things work	Inform spending of finite resources; assimilate large amounts of information and make judgements

* Including senior academic nursing and non-clinical representatives.

research policy as a political process and variably captured a sense of emergence and steady change[191]. This is illustrated in the following extracts:

> "So it's always a balancing act between how are things going to play out at the next announcement and whether, whether you can get a minister to announce the next stage of your ideas at all because of the other repercussions." (Senior DH policymaker, research policy development)

> "So you need this balance: you don't want to be captured, you don't want to be stifled by politicians, but you do need a measure of their support to enable things to happen." (Senior academic, senior DH policymaker and strategist)

However, there were differences across interviewees that appeared to be shaped by the contexts in which they were positioned. For instance, one GP explicitly equated the policy process to their own problem-solving skills; the representative from INVOLVE regarded research policy as a means of ensuring wide public representation; and non-medical representatives associated policy with medical power relations that needed to shift to take on a more multidisciplinary perspective.

a) Assumed rationality versus emergence

Those representing the DH generally provided more detail about how they conceptualised policy and often captured the fluid and interactive aspects of policymaking[192]. However on closer inspection of the texts there appeared a tension between this interpretive process and the staged approached needed to deliver it. To return to the senior DH representative cited above (see page 225), although they emphasised policy as emergent. When it came to describing this process they reverted to the language of a more 'rational' perspective (as opposed to constructivist, see Table 1 on page 34); and with discussion of the stages to follow in policymaking. This was evident in the following quote from the same senior DH representative, now describing the means by which topic areas became incorporated within new research policy arrangements:

[191] This political relationship between government and research resonated with earlier discussion relating to government and science (see chapter 7) and the on-going debate around the separation of research and politics.

[192] This was perhaps due to their own positions and responsibilities in relation to policy that was more of a focus within interviews, as opposed to, for instance, involvement in the historical development of primary care research.

> "So there was a table, it was a very formulaic way of doing it, there was a table that listed all the possible, it was very analytical, the things that we could be interested in, so was there a pharmaceutical pipeline in the, did the drug industry have drugs that were coming on in that area? Was there a strong research base in this country? Is there are strong clinical base? What was the health service burden of it likely to be? How amenable was it to research? You know, all those sorts of things that you do if you're prioritising, and I think primary care was actually, from memory, one of the columns for it. And diabetes scored the highest after cancer, of any of them, partly because of this primary care thing." (Senior DH policymaker, strategist)

This extract is significant as it draws on a number of devices and conceptualisations that have been described in earlier findings chapters. In particular it draws on the linear conceptualisation of the research process[193] as a means of informing policymaking; draws on commercial discourse as an important influence on identifying priorities within decision making; and situates decision making on a national, as opposed to regional, local or individual level. In addition it describes policy as analytical and formulaic, using tables and lists and implying a systematic, methodical, organised and controlled process. This stood in contrast to the more interpretive view of policy described within Table 3, thereby capturing a tension between *conceptualising* and *doing*. Hence, it appeared that a linear model of research and policy supplied a useful metaphor to policymakers by providing a straightforward mechanism for influencing complex processes of social and technical change.

i) 'Modern' government

The political nature of policymaking was evident in the changes sought by the Labour government following its election in 1997. This was followed by a series of reforms aimed at 'modernising government', including proposals to 'modernise' policymaking[194] that focused on making policy more strategic, more focused on public service users, and of higher quality and efficiency (Cabinet Office 1999a). The model of policymaking that emerged tentatively rejected a cyclical approach; recognised the lack of any 'standard' policymaking process; and advocated different policy having different needs. Instead the new 'modernised' model that emerged encapsulated a series of features, themes, competencies and definitions along with 'evidence-based indicators'

[193] See Figure 4 (page 140); Stokes (1997); and Tait (1999) for a useful description of this model.
[194] Defined by the Cabinet Office as "...the process by which governments translate their political vision into programmes and actions to deliver 'outcomes' desired changes in the real world." (1999a: 2.1).

that, it was envisaged, would guide departmental policymaking and allow for audit of good practice (Cabinet Office 1999b). Although such a model appeared to reflect a flexible and emergent approach to policymaking, it appeared to do so through incorporating restrictive processes and practices that resonated with findings in the previous chapter. For instance, new skills to meet the demands of 'modernised' policymaking included economics, statistics and relevant scientific disciplines; suggesting the position of policymaking within a wider rational scientific framework focused on particular approaches and information.

What was significant in the texts studied was that such 'modern' processes were not recorded within documents and interviewees did not refer to them[195]. This led me to explore how and where the language of 'modern' policymaking was used. As might be expected due to the focus on 'modern policymaking' in government departments, such language was evident in interviews with senior DH representatives (though not others) describing, for instance, processes for risk analysis, assessing feasibility and securing better regulation[196]. However, it was unclear whether such duplication of language emerged independently or out of a direct influence of government reforms relating to policymaking *per se*.

11.4 Construction of problems and solutions

Earlier findings chapters drew attention to the means by which inter-related discourses of science, technology and economy in particular have come to influence the development of health-related research policy and, in turn, impact on primary care research. These discourses have helped to shape the political process and what might be conceived as both policy problems and solutions, augmenting power of some and threatening or dissolving power of others. The means by which this transpires is explored below.

[195] Although some interviewees might not be aware of such changes, it was not unrealistic to expect that discussions with senior civil servants in the DH might have drawn on such developments as the modernisation process was not only filtered to executive departments, but progress then also reviewed.
[196] Regulatory impact assessment is now a central part of the policymaking process (Cabinet Office, 1999a; 1999b).

a) Discounts of the future

Stokes (1997) drew attention to the impact of elective democracy on policy processes and what he referred to as 'horizons'. He argued that the focus on the next election horizon skews the focus of policy, creating a tension between political short-termism and long-term interest/s. This was evident in the data: for instance one senior DH representative[197], contacted just before the 2005 general election, reflected on future research policy developments:

> "...it's a slightly awkward moment...it's also a moment when we're about to have an election so I can't, I cant say, I can't speculate about what the next government's strategic statements about research will be like, even though I may be able to guess! And I can't speculate what view the next government will take about the balance between, if you like, central structures and local freedoms, and this probably doesn't affect the substance of what you try to do but it a hell of a lot affects the way that you present it." (Senior DH policymaker, research policy development)

This interviewee (speaking just before the 2005 general election) not only emphasised the link between research and politics but also picked up on the short-term nature of policy cycles (or horizons). Indeed earlier I drew attention to the immediate enforcement of ministerial decisions relating to the loss of NHS Executive Regional Offices (see page 225) suggesting a process whereby solutions are constructed rapidly to enact particular courses of preconceived action. Similarly, the interim report of *Research for Patient Benefit* was timed to fit with the budget speeches of the Chancellor of the Exchequer and the Secretary of State for Health in March 2004 when they announced the development of UKCRC and increased NHS R&D funding[198].

This highlighted a tension between the need for political support on the one hand and a level of independence from the political system on the other. This is illustrated by one interviewee reflecting on the wider political contexts on primary care research:

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[197] Given the focus on sampling across a broad range of participants relevant to primary care research, there were few interviewees in senior government or civil service positions able to comment directly from experience in relation to this.

[198] This is not to suggest that the report did not have a high profile agenda from the outset: its remit included bringing forward practical proposals to ministers for implementing recommendations from *Bioscience 2015* (DTI, 2003a) and *Strengthening Clinical Research* (AMS, 2003). The announcements within budget speeches at that time appeared to provide additional legitimation for the final report publicly released two months later.

> "I would suggest that R&D be regarded as an independent activity, not one that's like a governed outreach of the Department of Health or the government. And by so doing one could create a climate and a structure whereby people could come not only with ideas but also with solutions to existing problems, and the dialogue between the Department of Health and the government, would then take place with a professional body that was kind of interested in raising standards and performing high quality research. So, I'm trying to think of a parallel...I suppose it's a bit like saying the MCC should be allowed to get on with organising cricket, and but of course they should remain closely in touch with the government, if the government were funding the cricket, to make sure there's a proper dialogue. But right now we're just too closely involved with the wrong kind of political process." (Senior academic general practitioner, NHS organisation)

Not only does this draw attention to the debate, originating from the Haldane principle and challenged by Rothschild, around a research-oriented body separate from government; but also draws attention to increasing centralisation and political control of research (see chapter 10).

b) The search for problems

According to Edelman (1988), a striking characteristic of the policy process is that solutions often come before problems. He suggested that those who favour a particular course of government action are likely to search for a problem to which to attach it in order to maximise support. This was not easy to explore due to the retrospective nature of the study[199] however; it was possible to identify areas where solutions appeared to guide problem construction. For instance, I previously referred to the *Mant Report* as being guided by earlier development of a primary care-led NHS and, in the preceding 1996 White Paper *Primary Care: Delivering the Future*, the identification by government of £50m available to expand the evidence-base for primary care. Through Edelman's lens this might represent a solution to which the *Mant Report* was subsequently developed as justification for this action. Indeed, although one of the questions addressed within interviews included 'to what problem was Mant a solution?' no specific answer was forthcoming, with interviewees instead drawing attention to the role of the report in pushing on an already open door[200].

[199] As opposed to identification of problems and/or solutions as they occurred *in situ* via, for instance, participant observation.

[200] Indeed, no one mentioned the preceding identification of the £50 million for primary care research.

This raised questions as to why different problems were identified and addressed at different times and what different stakeholders perceived them as solutions to. In addition there appeared a lack of transparency regarding the means by which problems and solutions were formulated and decisions made and implemented. This was evident in the lack of context and description provided within documents as to the selection of groups and appointment of chairs (see page 238), specification of working group terms of reference and methods of working.

On the whole, interviewees tended to focus on decision making and implementation, as opposed to the emergent nature of policy formulation. Exceptions to this included non-medical and pharmaceutical industry representatives' emphasis on the role of lobbying and the dominance of particular groups in shaping policy agendas. Another senior DH representative also suggested the *possibility* of more bottom up approaches where particular individuals or groups might be able to 'find voice' in order to draw attention to a particular (and potential) policy problem; a view reinforced in discussion with the representative from INVOLVE.

c) Non-problems

Given the breadth of documents studied, it was perhaps unsurprising to find that primary care research was often situated as a minor or non-storyline. In addition, the decision making process appeared overwhelmingly focused on wealth, as opposed to health: as I described in chapter 9, the health and social benefits (or dis-benefits) of policy were largely sidelined or ignored as non-problems and with less political orientation, influence or short-term gains; with emphases placed on problems and solutions associated with globally-situated, scientific and technological productivity. Indeed the ethical, moral and social dimensions of policy and involvement of the public were not reflected upon widely at all. This suggested that, as policy was framed and shaped by dominant discourses, so certain areas that did not fit well with this were not given attention in the formulation of policy problems. This reinforced earlier findings relating to the employment of strategic discourses in relation to primary care research, situating it outside of the main policy arena (see page 157).

d) Construction and use of 'evidence'

A range of sources of information is available to policymakers that might influence policy[201]. At the very least, most documents presented basic descriptive or administrative 'data'[202]. However, beyond this there was little indication as to how or why any information was collected and the means by which this was used. There were a number of exceptions including the presentation of oral and written evidence included within Select Committee reports that facilitated greater appreciation for the breadth of data collected, the context in which it was collected and how it was interpreted within the main report[203]. Similarly the *Mant Report* and subsequent *Topic Working Group on Primary Care* (DH, 1999a) both included wide-ranging and detailed work[204] and provided links between specific objectives, data collected and recommendations made. Both groups were informed by what one interviewee referred to as a 'distributive model' involving a large number of people to lead on work in a range of areas across primary care. Such a model was not evident in the other texts studied. As different documents (implicitly or explicitly) had different aims and audiences, it may well have been the case that inclusion of in-depth information was either unnecessary and/or inappropriate. However, in many cases, the result was that the link between data and argument (or recommendations) was not always clear.

Although research evidence was cited by interviewees as informing clinical decision making, it was not really mentioned in relation to informing health-related research policy. As Table 4 indicates, research policy was seen to be influenced by for instance; negotiation, committee participation, lobbying government, resource issues, opinion, political embarrassment and risk analysis. Only one interviewee referred to the use of 'evidence': this was the interviewee not previously involved in research policy[205].

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[201] Including, for instance, a wide range of research data relating to peoples experience, opinion, judgment, skills, expertise and tacit knowledge.

[202] Such as a breakdown of UK R&D funding; R&D funding as a percentage of GDP across countries; number of academic vacancies and posts filled; research programmes in place; number of applicants to named initiatives; or bibliometrics.

[203] I am not suggesting that this presents the 'right' model or that other reports or initiatives have the time and/or resources to undertake and present such detailed work.

[204] Such as a review of documentary evidence and presentation of an annotated bibliography, work undertaken by sub-groups on specific topic areas; an external project on primary care research networks; or consultation with wider NHS organisations.

[205] This may be due to this interviewees prior involvement in wider health policy and awareness of the shifting health policy environment (as opposed to academic medicine environment) and general interest in clinical evidence.

However, as the following interviewee suggested, there may be inherent differences in the type of evidence that it is possible to obtain:

> "...to some extent the reason why research to inform practice is easier to do and easier to implement than research to form policy and it's simply to do with complexity and scale. So if you're doing clinical research then it's literally take statins, your cholesterol falls, you don't die of heart disease – I'm simplifying but it's a fairly straightforward thing - but we want to create good leaders, you can go off and research the leadership literature but...it's a spurious precision that you're looking for...it's not simply that the evidence isn't there, it's that it's not possible to obtain some of the evidence." (Senior DH policymaker, strategist)

i) What matters is what works

The notion of 'evidence-based principles' appear at the heart of the Government's reform agenda for better policymaking and policy implementation (Cabinet Office 1999a; 1999b); with 'what matters is what works' a repeated theme. This was slightly at odds with the multi-faceted descriptions of policy in Table 4 (page 226) that embraced social and political contexts, values and practices. One interviewee encapsulated this by discussing polices as complex interventions themselves:

> "I mean it's partly in the nature of the thing you know, the more complex the intervention - and policies are very complex interventions – you know, the more difficult it is to decide what your evidence base is..." (General practitioner, no research policy experience)

This appeared to have shaped what might be conceived as 'good evidence' in relation to policy, encouraging a particular focus on 'what works', as opposed to addressing more complex problems or areas. There were a number of examples of areas that appeared sidelined, excluded or ignored due to the complex nature of changing organisational behaviour with some interviewees delineating between things that were easy to set up (and get done) and things that were more complex (and more difficult to achieve). The notion of 'what works' appeared to reflect the political imperatives of the policy process, whereby information (or 'evidence') was associated with different and often immediate political needs; and contrasted with research based evaluation or, as the following extract states, replication:

> "So rolling out the topic-specific networks is the first thing that needs to be done. We then, the Research for Patient Benefit Working Party is explicit on this, want to move to a generic network as soon as possible, and that's

> also why it was umming...whether to do just one more network. And it's exactly the sort of things you were talking about: John Pattison used to use the phrase to 'do the replication study'. We've only done one experiment, cancer; shall we do another experiment to see whether we can do it again? And the politicians don't like piddling around like that, let's do all of them." (Senior DH policymaker, strategist)

This extract is significant in drawing attention to the tension between political needs and research-based evidence. It suggests how areas are selected for policy development in line with the wider political focus on 'what works'[206]. Following from this, it is worth noting that although around half of the documents studied indicated a timetable for development or implementation, none indicated any detailed plan for future evaluation and/or review.

ii) Rhetorical construction of policy

The focus on the use of rhetorical devices within documentary analysis was valuable in exploring how information (or 'evidence') was presented in particular ways to support the policy discourse. The structure, presentation and use of rhetorical devices across documents was varied and appeared to carry ideological messages in relation to the perceived best means by which health-related research policy should proceed. It was evident from the data that rather than presenting in-depth information relating to research-based evidence or explicitly acknowledging the role of opinion, lobbying or committee work; documents often made use of rhetorical devices such as 'systematic vagueness' and 'category entitlement' to support arguments and recommendations.

In previous chapters I have drawn attention to the means by which rhetorical devices have been used within policy[207]. Table 5 provides additional examples of the different rhetorical devices used from across the documents studied[208] indicating that such

[206] Drawing on other examples from earlier findings chapters, it also reflected the lack of evaluation of cancer networks prior to the transfer of this model to other areas (see pages 212 to 213); the lack of information available on career pathways for non-clinical researchers (see pages 184 to 185); and the lack of attention paid to social (dis)benefits surrounding science and technology generally (see chapter 9).

[207] See for instance page 190 relating to the use of 'expert validation' to imply broadly conceived public benefit from economic investment; page 218 describing the use of 'systematic vagueness' to evade what innovation really meant and how this related to health and research; or page 116 describing the use of 'discipline' to construct a narrative of general practice as resistant to the powerful discourses of clinical hospital medicine.

[208] No instance of 'consensus and collaboration' was found in the documents studied.

Table 5: Examples of rhetorical devices used in policy documents

Rhetorical device*	Example
Vivid description	The third reading of the *NHS Reform and Health Care Professions Bill* (House of Lords Hansard, 2002) included a descriptive account that emphasised previous successes in order to support the argument of the day focused on learning and research in PCTs. For instance, Baroness Cumberledge proceeded as follows: "*One of the great hallmarks of your Lordships' House has been its' championing of research and scientific endeavour. I remind your Lordships that it was this House that in 1992 persuaded the government to introduce the post of Director of Research and Development in the Department of Health. That was strongly resisted at the time, but was eventually conceded. That post, which was the result of an initiative from your Lordships' House, has made a marked difference to how the National Health Service now invests in and carries out research. I suggest that we hold to that which we know to be true...and support this cross-party amendment with some of the same determination that the House exercised 10 years ago.*"
Narrative	The *Peckham Report* (DH, 1991) was constructed in such a way as to lead the reader through what appeared as a natural means of developing research infrastructure and strategy and as a causal sequence of inevitable events. For instance, the Central Research and Development Committee was introduced and described as the effective body for determining research priorities and the wider NHS programme despite the fact that it had yet to even meet at the time the report was published.
Category entitlement	The working party that developed *Research for Patient Benefit* (DH, 2004b) was set up as an 'expert' panel of "*very senior and busy people*" (page 9) but with little information provided as to the basis for selection and contribution. The report that followed presented a model of research infrastructure that emerged out of this entitlement, with no examples given and no additional 'data' provided to support the decisions made.
Systematic vagueness	On a number of occasions *Research for Patient Benefit* (DH, 2004b) suggested that there have been improvements or progress in particular areas in order to support the overall direction proposed within the document. However little real substance was provided to support this. For instance: the report states that "*...some progress has been made in developing national standards and guidance*" (page 9); or "*...there is evidence that the great majority of people support clinical trials and associated research with state-of-the-art specialised treatments*" (page 11); with no additional detail provided.
Empiricist accounting	Within *Research for Patient Benefit* (DH, 2004b) research was classified in new ways in order to align with the proposals put forward within the document. This includes a new hierarchical structure focusing on 1) basic science; 2) experimental research; 3) large clinical trials; 4) clinical effectiveness; 5) operations/service delivery; and 6) preventative care/public health research.

Rhetoric of argument	The *Framework for Government Research and Development* (Lord Privy Seal, 1971) appeared very focused on 'scientific management' as an approach to organising research, emphasising efficiency in particular. The structure of the document and the language used was presented in such a way as to suggest that the approach Lord Rothschild put forward was the only (efficient) means possible in order to "*...ensure that the organisation and management of R. & D. is logical, flexible and decentralised, the prerequisites of an efficient system*" (page 1). For instance, in the introduction he outlines six questions that one might expect to ask of government research and then why these are not addressed systematically: there is no attempt to consider wider issues or other factors.
Extreme case formulation	*Strengthening Clinical Research* (AMS, 2003) attempts to justify the beneficent nature of early access to clinical trials with the use of one example: "*the success of the UK clinical trials for all children with acute leukaemia led to progressive improvements in therapy that has few parallels in modern medicine.*" The formulation and use of this extreme and emotive case placed a particular emphasis on the argument that would not be achieved by, for instance, drawing on examples of trials for back pain in adults of working age.
Lists and contrasts	*Research and Development for a First Class Service* (DH, 2000b) makes use of lots of bulleted lists and boxes to describe a structured programme of modernisation and series of policy principles behind NHS R&D. This has the effect of making such descriptions appear both logical and indisputable.
Justifiable contradiction**	Both the *Mant Report* (1997) and *Primary care: delivering the future* (DH, 1996) draw attention to the lack of research expertise and posts within primary care by comparing GP academics to those in secondary care. This specific focus on general practice contradicts earlier discussion within the documents embracing the multi-disciplinary nature of, and varied roles within, primary care. This appeared to be justified in relation to the availability of data.

* For a description of rhetorical devices refer to Box 3 (page 53). 'Consensus and collaboration' has not been included here as no instances were found across the documents studied.

** 'Justifiable contradiction' has been added to the list of rhetorical devices provided in Box 3 (page 52) as it draws attention to the devices employed by discourses in an attempt deal with opposition (that, in turn, allows for the possibility of change).

devices were used to convey or enforce particular policy messages, themselves shaped by dominant discourses.

11.5 Actors and experts

Across the documents studied, there were several actors who appeared frequently and explicitly as contributors to the policy process. Table A3 in Appendix 9 provides an overview of contributions according to frequency and role[209]. What was clear from Table A3 was that several people stood out as contributing to a range of policy initiatives. Those most regularly involved included DH representatives, as well as wider government health representatives and those situated within the broader NHS; several primary care representatives (all of whom were general practitioners); and wider representation from academic and charitable organisations. Turning to less extensive contributions[210], this list expanded substantially to include wider representation across health-, policy-, and research-related groups, professions, disciplines and organisations (including a wider representation of primary care). It was not possible to ascertain the broad influence (or otherwise) of particular stakeholders or their organisational, professional and disciplinary roles and affiliations within the majority of documents studied[211]. Instead broad statements were made relating to, for instance, 'consultation' or the contribution of 'experts'.

This analysis drew attention to the role of group interaction and negotiation in forming research policy; that it is not the product of 'data' alone (as captured in Table 3, page 226). At some point different stakeholders, be they politicians, civil servants, groups of experts, medical professionals, social scientists, members of the public or industry executives, have to come together, deliberate and partake in the process of decision making. These different stakeholders have a role in reproducing, sustaining or transforming power relations within the context of health-related research policy. This

[209] Care needs to be exercised in interpreting this table as, for instance, it is clear that although those within the DH are listed as contributing on several occasions, we also know that they contribute to additional work outside of such formal policy arenas. Likewise, other groups and individuals may contribute to different elements of the policy process generally (e.g. via think tanks, lobbying), or in relation to specific documents. For instance, findings have indicated the means by which industry can influence and shape the policy agenda but this was not indicated via the contributions listed within Table A3 alone.

[210] I.e. in terms of the number of documents listing individual contributions.

[211] As suggested earlier this may well require a different methodological approach to observe policy development *in situ*.

was captured within interviews that drew attention to the necessarily selective nature of the policy process:

> "The putting together of a so-called committee or group, it should be almost a subject! It is the most crucially important thing to choose people that don't come with baggage that really are free thinkers that are not representing the Royal Society of this or that, I mean, obviously people do belong to things but I just think it is *so* important to try and put together, to the best of your ability, a group of people you think are going to be constructive. And I think that if political considerations start interfering with that – even political with a 'small p' or 'big P' political - you know, you must have the president of the Royal Society...that is very unfortunate. And I would *absolutely* resist that... you're looking for problem solving not acquiescence." (Senior academic, senior DH policymaker and strategist)

This is significant in pointing to the difficulties in balancing representation with effective processes. The association with rational 'problem solving' also suggests that it is possible to attain input that is somehow apolitical, which belies earlier findings relating to the inherently political nature of the policy process. This view appeared to be promoted via the presentation of policy documents where there was little acknowledgement about how particular organisations, individuals or interests were selected to contribute, nor about the nature or extent of that contribution to decision making process/es.

a) Representation of primary care

The analysis of documents presented in Appendix 9 identified a number of key individuals located within primary care that appeared to be more closely involved with the production of policy, all of whom were general practitioners (including Professors Mant, Kinmonth, Jones and Pereira Gray). This appeared to reinforce earlier findings that general practice was the acceptable and representative face of primary care within such policy circles[212]. This was reinforced by interviewees who cited these same individuals as making a difference within research policy circles; and the Heads of Department group as the 'political epicentre' of primary care[213]. For instance, one senior GP academic suggested that their own contribution to policy had emerged as a result of being regarded as 'acceptable' in terms of fitting within existing organisational and professional boundaries; thereby facilitating a narrow representation and the possibility

[212] See the reproduction of scientific colonisation on page 167.
[213] See page 171.

of change only within the boundaries of dominant ('acceptable') discourse/s. This suggested that those who are responsible for seeking policy advice tend to focus on sources that are relevant to the matters with which they must deal; generating information or advice within existing institutional and political structures and providing limited opportunity for radical transformation or shifts in relations of power.

This resonated with the work of Edelman (1988) who, in discussing the role of the public in policy formulation, suggested that the depiction of policy as taking place in a remote forum, involving intricate negotiations between high status officials and unique access to intelligence suggested an exclusion of the rest of the population from that 'special world'. In considering health-related research policy, it appeared that the focus on particular political structures, professional and medical representation, and access to information relevant to policymakers decision needs, suggested the exclusion of wider primary care research from that 'special world'. It was not possible to tell from the data studied if this was indeed the case though it intuitively 'made sense'. However, others from primary care (and beyond the bounds of general practice *per se*) were cited in relation to contributions to individual policy initiatives suggesting some access to this 'special world' via (at the very least) importing of 'expertise' as needed or appropriate.

The complexities of representation within the policy process was captured by a senior academic nurse by referring to the difficulties in balancing pluralist or democratic representation with the range of disciplines that make up primary care and research in that context. This was reflected by other interviewees, suggesting that primary care was somehow different: more difficult to understand or accommodate than other areas. For instance:

> "Going back to primary care...obviously the case for both research *and* development in primary care is very powerful, but...I was struck by the fact that when we tried to involve GPs...the difficulty was simply a difficulty of time, of getting away, of getting to any meetings. So when one talks about primary care, is one talking about academic primary care or is one talking about also primary care 'out there'. And I suspect that very often one's talking about university based departments even though they may do primary care and the problem of the general practitioner being involved seems to be sidelined, it's still quite a difficult problem." (Senior academic, senior DH policymaker and strategist)

This extract is significant in two respects: firstly in drawing attention to the practical difficulties of involving primary care; and secondly in the emphasis on general practice as the route to that involvement.

In relation to 'expert validation' in the construction of policy, *Research & Development for a First Class Service* (DH, 2000b) referred to the role of 'expert advice' as feeding into the selection of priorities but then used 'systematic vagueness' to avoid acknowledging how and why group selection might reinforce existing power relations. Focusing now on primary care research, on page 134 I drew attention to the construction of three expert advisory groups (emerging out of the Topic Working Groups within the *Strategic Review of NHS R&D Funding* in 1999) on cancer, heart disease and stroke, and mental health but taking account of the commitment to primary care research. There was no recognition that consideration of primary care by 'experts' situated within other groups might be problematic (users and staff were positioned not as 'experts', but as 'contributors' to identifying non-priority areas).

This raised questions as to how best to manage diversity and ensure representation of (and engagement with) a range of views within policy? How this balances with selection of committee members and undertaking committee work to ensure such representation and engagement? And what the limits of engagement or participation might be? This was discussed with several interviewees, but particularly the representative from INVOLVE who captured a number of issues relevant to wider participation in the policy process[214]. Of particular relevance was the difficulty representing the public via a diverse organisational structure:

> "...sometimes persuading people to have service users rather than people representing service users or people who are advocates for service users on things is still quite daunting for them. And I've been there on committees where people who maybe are in some way a patient or a long term user of services say things, and it can be so much more powerful because what they're saying is really coming from very true personal experiences, while what we're saying is often from what other people have told us, and what's important in issues. But there is this thing of, there's almost quite often a sort of, the listening and the wanting to engage but then not quite getting

[214] It is important to note that until this point I have not drawn directly on this particular interview. This was partly as a result of the in-depth discussion in relation to the issues raised and that this was somehow related, but not central to, the research undertaken. Indeed, although this particular interviewee was highly articulate, they were not at all knowledgeable about primary care and hence discussion tended to focus on the intricacies of the policy process and public involvement *per se*.

> what it is, quite what we're trying to say and how far we're suggesting that things are slightly different. And almost wanting to sort of make you part of them rather than be this different view on things." (Representative from INVOLVE)

This resonated with the situation of primary care research (described above and in earlier findings chapters) relating to a willingness to engage on the part of policymakers, but without an understanding of the nature of that engagement or those involved. In this respect public involvement and primary care research may share similar problems in trying to have their voice heard and understood in ways that transform existing policy discourse.

11.6 Summary

This chapter has explored the policy process in relation to primary care research. It has described a range of contributions to policy from across organisations and individuals, documentary sources, and varied sources of 'evidence' that were variously included within, or excluded from, the policy process. In drawing on a series of examples from the texts studied, the chapter has aimed to illuminate the means by which the discourses described in chapters 8 to 11 have emerged, been employed by different stakeholders for varying purposes and have been sustained or transformed over time. Lastly it has drawn attention to the interpretive, emergent and inherently political nature of the policy process, as opposed to restricted or technocratic evolution involving a number of easily identifiable stages.

* 12 *

DISCUSSION

12.1 Introduction

This final chapter reflects on the theoretical and methodological approach adopted; explores the acceptability of such an approach in relation to the research aims and objectives; and considers transferability beyond the confines of this work. It draws together and critically reflects upon the main findings presented and, in doing so, it draws particular attention to the key moments in health-related research policy that have impacted on primary care research; the means by which primary care research has responded to these; the impact of more recent policy developments; and the different means of conceptualising and practicably approaching the policy process in order to address some of the tensions identified.

12.2 Discourse analysis as a means of analysing research policy

In chapter 2 I reflected on the development of a rational approach to policy analysis whereby the methods associated with the natural sciences facilitated a search for rational and knowledgeable governance. Discourse analysis offered an approach that was explicitly sensitive to the social, political, cultural and historical contexts in which policy representations are made and thereby offered an alternative to the rational representation of a universally understood world. It provided a means of identifying multiple perspectives involved in the policymaking process and, through appreciation that the social world in which research policy is situated can be understood and constructed in multiple ways, opening up the possibility for social change (Fairclough 1992a; 2001; Phillips & Hardy 2002; Yanow 1996; 2000). In addition, it was an approach that is increasingly being adopted in the analysis of healthcare and policy

contexts due to its ability to bring critical insight to often complex and expansive areas and incorporate a socially relevant understanding of the construction of policy[215].

A number of writers have drawn attention to the complexities of evidence-based policy and suggested that whereas research evidence (broadly defined to include information beyond that conventionally considered acceptable by academic researchers) might feed into the policy process, there are also many more elements to consider (such as opinion, experience and grey literature) (Cummins & Macintyre 2002; Greenhalgh, Kostopoulou & Harries 2004; Lomas 1997; Russell & Greenhalgh, submitted; Willison & MacLeod 1999). Indeed, Greenhalgh and Russell recently argued that policymaking needs to be appreciated as social drama where 'evidence' equates to:

> "....moves in a rhetorical argumentation game and not as the harvesting of objective facts to be fed into a logical decision making sequence." (2005: 31)

A critical concern with language and discourse enabled the unearthing of such rhetorical argumentation and the influence of social and political subtexts that a more conventional analysis might overlook. Such conventional analyses often ignore complex sets of questions regarding the construction of policy and the role of values, emotions and morals (for instance, by taking for granted the content of documents and not considering the contexts of what has, or has *not*, been said) and by doing this, may unintentionally treat all those involved as if they are not conscious beings capable of (re)shaping the world around them. In his recent description of the potential for 'constructive conversations' about health policy Marinker explicitly acknowledges the role of language and discourse and suggests that:

> "...the light of evidence and reason is inevitably deflected through the prism of the values, preferences, emotions, intellect and personality of all the individuals who take part." (2006: 10)

[215] For instance, Rayner et al (2006) have recently used critical discourse analysis to analyse the National Service Framework for coronary heart disease in order to better appreciate the values behind such healthcare policy. Redwood (1999) and Greener (2004) used a similar approach to explore healthcare settings; and writers such as Edelman (1977, 1985, 1988, 1998), Yanow (1996, 2000), Fischer (1993; 2003) and Fairclough (2000a; 2000b) all provide theoretical and applied analyses of policy. See chapter 3 for further discussion and examples of their work.

a) Reconceptualising the relationship between policy and knowledge

However, despite such challenges from more interpretive perspectives, the recent focus on evidence-based policy and modernising government (Cabinet Office 1999a; Cabinet Office 1999b) suggested a perceived rationality in the relationship between policy and knowledge. Within government, this led to a focus on 'what works' and away from more complex processes of social interaction and change. For instance, findings indicated a lack of evaluation and review of existing initiatives, despite their wholesale transfer across different contexts. This is evident in the wider literature that indicates that policy changes in the fields of health and social care have historically been implemented with little evidence of their effectiveness (for instance, in the case of GP fundholding (Gosden, Torgerson, & Maynard 1997); at speed that often pre-empts the findings of any evaluation that may be in progress; or despite available evidence (Greenhalgh , 2004). Indeed, comprehensive evaluation might lead to a questioning of the ideology upon which policy appears to be based; thereby challenging existing relations and facilitating other approaches and types of research.

Not only did earlier theoretical discussion challenge the assumptions behind such rationally conceived models but subsequent findings indicated that this was not the only means by which policy might be conceived. For instance, the lack of contextual information within documents suggested that information and politics were divorced from context (thereby presenting documents as rational and objective policy administration) belying the messy and emergent process described by interviewees. Following Bonner (2003) this raises questions as to whether the government's directive to develop evidence-based policy and practice is itself supported by the evidence, or whether it is vacant rhetoric?

Interpretive models of policy stand in stark contrast to examples such as Rothschild's customer-contractor principle that attempt to construct and apply rationally conceived models of research and of policy that deny social and political complexities. Indeed, findings have shown how Rothschild's' report marked a watershed in terms of greater government control over R&D, that was enabled by immense economic and technological change, and led to a reworking of the relationship between science and government. A similar emphasis was placed on the creation of a DH research directorate whereby proposals for an independent National Health Research Association were

rejected by the government of the day as unnecessary and the demand for a special allocation of funds as incompatible with the workings of the Science Budget. This arrangement continues at the time of writing and, in the short-term at least, looks unlikely to change. Indeed, the recently revised NHS R&D Strategy – *Best Research, Best Health* (DH, 2006) - has become re-badged as a government (as opposed to departmental) health research strategy, delivering NHS support for wider Government commitments (and particularly those reflected in the different versions of the *Science and Innovation Investment Framework 2004-2014* (HM Treasury, 2004a; 2004b; 2006) that appeared to reflect a renewed intimacy between science and government).

The linear model of knowledge transfer and communication that followed from a rationally conceived approach to policy ignored some of the complex issues around communicating and identifying what information is actually needed beyond taken-for-granted organisational, professional or disciplinary boundaries. Despite some acknowledgement of the fluid nature of policy, the policy process tended to be conceptualised in stages with the effect of denying that policy is greater than the sum of its parts (i.e. by breaking policy into stages it becomes decontextualised). This appeared to capture a tension between conceptualising and doing, between rational perception and practicable interpretation.

This was particularly evident in the means by which research was conceptualised, and by the plethora of terms and concepts (such as basic, tactical, applied, pure, strategic, translational, experimental, clinical, epidemiological, fundamental) that were often used unquestioningly. Stokes (1997) reconceptualisation of the research process might well be fruitful but no one has yet incorporated this (or any other conceptualisation) within UK science policy. As a result research policy has been repeatedly reproduced on the same linear model of research that appeared to have supplied a useful metaphor to policymakers by providing a straightforward mechanism for influencing complex processes of social and technical change. But other models and metaphors are available. Such models reflect a post-positivist turn to policy analysis (Fischer & Forester 1993; Edelman 1998; Hoppe 1999; Yanow 2000) that acknowledges the complex nature of policy and particularly as the outcome of interactions or negotiations among various actors (Williams 2002; Yanow 1996); the role of language, discourse and values in policy development (Baachi 2000; 2004; Greener 2004; Hajer 1995; Marinker 2006);

and participatory approaches (Fischer 2003; Hoppe 1999). A number of suggestions emerge from such approaches to deal with the tensions inherent within policy, many of which have been discussed in earlier chapters. Most recently, Marinker (2006) provides insight from a health policy perspective: he suggests that a greater appreciation of the role of language and values within the different dimensions of health policy process would be beneficial and emphasises the use of alternative and mixed metaphors to escape the traps of language; invention of new spaces for developing 'constructive conversations' and suspension of the general rules of engagement associated with traditional committee work to facilitate this. Following Morgan, his emphasis is on 'imaginisation': the process whereby we are able to imagine how things might be different.

Focusing on primary care research, the route of applied research followed by many primary care departments has led to a focus on domains of clinical epidemiology, outcomes research, evaluative sciences, medical decision making and educational analysis. Such activities fit broadly with investigation of the character and effectiveness of innovations in medical practice and public health, precisely those fields that clinical research leaders have attempted to keep at arm's length, intellectually and professionally. Although the typically second class status of this type of research has been acknowledged with *Best Research for Best Health* (DH, 2006) it is unclear if (and how) the dominant discourses that shape such a view are to be redressed to allow for rebalance. Indeed, findings suggest that no such radical transformation will be forthcoming in the near future given the long-term focus within government policy on science and technological innovation. This is reinforced by recent policy developments. For instance, although a decision to create a single research fund (combining NHS R&D and MRC funding of at least £1 billion) was announced in Budget 2006, the subsequent *Cooksey Review* (set up to review institutional arrangements) explicitly builds on existing policy and the dominant discourses described within findings chapters; and considers such arrangements solely in the light of objectives framed in health, science and economic terms alone (Cooksey 2006).

b) How does knowledge speak to power?

Rather than challenging rational approaches to health policy *per se*, this research has been particularly concerned with the uncritical use and naivety of the role of power and

knowledge in shaping policy (indeed from a Foucauldian perspective, the way that power works is central to political mechanisms and processes (Foucault 1977)). From a social constructivist perspective, no single authorised truth ever emerges to dominate a society: instead there are many competing ideas, institutions and discourses. This means that, rather than ever reaching a finite resolution where such ideas, institutions and discourses are in 'perfect balance', we require some means of coping with the tensions between different perspectives and accounts. Hence, as findings suggest, we need to be aware of and address any tensions inherent across a range of competing interests; public and private healthcare contexts, professions, disciplines and institutions that shape research subjects and practices.

Findings suggest that individuals and organisations or professions have different roles and levels of input to the policy process with some standing out as potential ideological benchmarks (e.g. the impact of a new DH DRD that might mark a change in direction or support). What is less clear is how values and preferences embodied in these come to impact on the policy process and how the distribution of power throughout society (and healthcare and research contexts in particular) impacts on the selection and inclusion (or exclusion) of policy stakeholders. Although the focus of policy construction was not solely on individuals as the only influencers, their appearance and influence within and across certain groups was telling, not least in the dominance of general practice as the acceptable face of primary care. This 'acceptability' might be considered a requirement of government policymakers as 'originality' might lead to upset which, Edelman (1988) suggests might in turn lead to loss of job. In effect such an approach maintains existing ideologies and power relations. Edelman reinforces this by suggesting that political leaders (and I take this to include those responsible for science and research policy) must 'follow their followers' and embrace fashions and beliefs of the time, thereby resisting originality, creativity or risk-taking. This suggests a tension within current policy that aspires to such qualities (not least in the recent emphasis on innovation) and yet, by its very nature is constructed in such a way as to work against them. It also reinforces dominant views of 'acceptability': those researchers considered 'good' in terms of ideological views of what makes worthwhile knowledge being more likely to become rewarded by being included within policy processes (and thereby reproduce them); and those considered 'dangerous' being implicitly punished and possibly excluded.

This is not to suggest that transformation or change is not possible. Quite the opposite, an additional advantage of the discursive approach adopted lies in allowing for the possibility of resistance and change (Parker 1992; Fairclough 1992). As a discourse refers to other discourse (see Parker's framework on page 73) any contradictions in one opens up questions about what other discourses are at play. This allows for new statements to be made and, following from this, allows for the possibility of social and political transformation. The concern with power in distinguishing discourses is therefore not simply about identifying power for the sake of it, but that the existence of power across society allows for the possibility of resistance and change. In other words power relations reflect a spectrum of social and political interests across society and it is not only those who 'hold' power who are the ones employing policy discourse/s (Baachi 2000). For instance findings suggest that, for a number of reasons, power is predominantly held by general practice as a representation of primary care research and yet non-medical voices are able to employ similar discourses and argue for wider representation.

Such changing relations of power were encapsulated in the shifting emphasis placed on the health-wealth dichotomy in relation to NHS R&D that appeared to reflect a wider balance within society prone to being pushed or pulled (or simply tipped) in different directions. Likewise, although dominant discourses associated with science or economy might shape research subjects (in terms of who might be considered a 'good' researcher) and research practices (for instance, of what might be considered worthwhile approaches to data collection), other discourses were also at play (though to a lesser extent) in relation to social benefit, participatory democracy and community. The tensions between such discourses open up possibilities for change with, for instance, calls for a reduction of the social and economic costs of industrialisation and a greater focus on the social and cultural contributions to political development.

Aside from the potential for change, this example reflects a pre-existing tension between the social welfare model of patient benefit and public involvement; and the economic model that is focused on rational self-interest and consumption:

> "...perhaps the key issue that arises in the funding of science is whether there is an inherent incompatibility between institutions that largely consider their function to be the production of knowledge for the public domain and a government pushing for the greater relevance of output to the needs of UK industry which will largely benefit from knowledge kept in the private domain." (Stoneman, 1999:246)

Indeed, despite policy rhetoric about the need to moderate competitiveness with social justice, the reality appears to have been an intensification of new managerialist methods (Shore & Wright 2000) and little in the way of enhancing health and social benefits. Findings suggest that the means by which this is achieved is via an emphasis on legal rational bureaucracy and denial of conflict, power, subjugation and socio-cultural change; a suggestion that is reflected in the wider literature. For instance Shore and Wright refer to the new managerialist ideology as a:

> "...permanent and profound system of governmentality that is radically transforming all areas of working life" (2000:79).

From this perspective power is naturalised; potentially goes unchallenged; and ceases to be recognised as political or ideological.

The wider literature provides numerous examples in which seemingly routine and bureaucratic practices often have profound effects on social life (Shore, 1999; Demeritt 2000; Power 1997; Rayner 2006). Focusing now on primary care research/ers, such practices embody a new rationality and morality and are designed to engender a refocusing within organisations undertaking research and promote norms of conduct (or research practices). For instance, the NHS R&D Strategy (DH 1991; 2006) appeared to represent a form of expert knowledge that was pivotal to governmentality in that it provided a means by which research and researchers could be compared against norms of accepted practices and preferences, and trained to conform and produce in line with this. This appeared to reflect a renewed emphasis on the relationships between rational or scientific approaches and managerialism embodied in evidence based policy (Sanderson 2002).

As the importance of knowledge as a central societal resource has increased, so this has demanded regulation of the production, utilisation and access to such knowledge (Ferlie & McNulty 1999) that has influenced changes in the relationship between government,

industry and universities. The increasing 'creep' of corporate discourses associated with the dominance of pharmaceutical and biotech companies, or the rise of the internal market and its influence on health care research as a marketable resource has contributed to an increased tension in the triple helix model whereby:

> "...changes in the underlying rationale for public support of academic research have been accompanied by the business-school speak of mission / vision statements, strategic planning, total quality management, customer satisfaction, and the like, which reflects the advent of managerial practices drawn from the commercial world." (Demeritt 2000: 309)

Just as a number of alternative models of policy have emerged, so there are suggested means of addressing such forms of governance. For instance, Shore and Wright (1999) advocate the creation of an institutionally acceptable language to express shared grievances about the preoccupation with measurement, performance and quality and to re-establish concepts of trust and autonomy. This resonates with Marinkers' (2006) suggestion regarding the constructive use of language to find alternative means of pursuing policy through metaphor, creativity and 'imaginisation'. However, this might be easier said than done. Findings indicated that innovation and creativity were socially constrained by the discourses at play and shaped in particular by scientific and scientistic discourses, the medical and clinical infrastructure of health-related research and corporate-style, financial incentives. However, rather than assume a loss of creativity due to the particularly discursive view of innovation that is constructed via current policy, the process may encourage social struggle to re-structure discourse (rather than conform and reproduce dominant institutions and relations of power), which itself may lead to greater creativity. Permission to fail might also encourage researchers to challenge old ways of working, be innovative and/or adopt a more intellectual and critical perspective embodied in earlier generations of academe (Demeritt 2000). Alternative forms of accountability are also possible, such as increased partnership and a more democratic consensus between all interested parties (Hoppe, 1999; Fischer 2003; Milewa, 2004).

c) Advantages and disadvantages of discourse analysis

As a methodology, discourse analysis has been criticised for failing to account for analytical decisions and for over reliance on subjective judgements. I have attempted to address this by offering readers a well-documented, theoretically situated and reflexive

account of the methods used (for instance, refer back to Chapter 7 for a detailed reflection on potential researcher biases), as well as employing an established framework for distinguishing discourses (Parker 1992; 2002). Not only did this offer a series of illustrated stages enabling both a theoretical and practical appreciation of analysis; but it also facilitated analysis of power, ideology and institutions that I argue are essential to any analysis of policy.

To enrich this process further, I imported theory that was relevant to the aims and objectives of the study and theoretically consistent with the grand narrative of poststructuralism in which the research is situated. For instance, early consideration of management ideology led to the use of 'governmentality' that facilitated a useful connection between academic theory, public policy and political power and facilitated understanding about how neo-liberalism works to shape the conduct of populations.

The focus on these particular theories as opposed to others was led by the aims and objectives of the study; the need for consistency with the theoretical and methodological approach adopted; and unavoidable restraints of time and space. In addition, my focus has been on distinguishing discourses as opposed to, for instance, exploring the formation of networks of policy stakeholders. Hence, other bodies of literature that did not take account of the temporal elements of policy discourse within analysis, or facilitate the means by which objects and practices were shaped discursively through consideration of the use of language were not included. However as a result of this focus, unanswered questions regarding, for instance, the processes by which discourses legitimate and facilitate different activities, outlooks and social relationships (Macnaghten 1993) may well remain.

I referred earlier to the criticisms sometimes faced by poststructural analysts regarding a lack of linguistic resources for analysing texts and failing to anchor their descriptions of large-scale discourses with reference to the actualities of text. I was concerned to address this from the outset as it reflected tensions between text and context; concerns about how far the research should go beyond any particular text to arrive at an interpretation; and the tension between the production of discourses, the manner of their deployment and implementation (Baachi 2000). Guided by my research questions, I focussed more on large-scale discourses to show how primary care research policy, as

an inherently social and political process, might variably be constructed. However I have also paid attention to textual communication, rhetoric and language to show how such discourses are deployed or communicated across audiences and consider the implications for further development. However, I accept that I might face some criticism from conversation analysts or those with a narrative concern regarding the lesser influence of linguistics.

i) Data collection and analysis

The approach to sampling offered an explicit means of identifying policy discourses across different texts, as well as considering the nature of different texts as contributors to policy construction. Indeed, findings indicated the importance of considering policy across different sources and, in particular, beyond the confines of documents and to include the actions that preceded and followed. Although useful in providing a snapshot of particular intentions, documents alone presented a rather misleading view of policy in that they failed to account for the actions that follow as part of the social and political policy process. Questions remained as to how problems became constructed, excluded or ignored; who was and was not able to contribute to this process and to subsequent interpretation; and how this was shaped by particular discourses. The subsequent emphasis within findings chapters on such a broad range of material therefore provided additional justification for the sampling choices made to include a range of policy documents, interviews and supplementary contextual material.

Given the lack of any definitive sampling framework available for any of the texts studied, the approach to sampling presented some challenges, not least in terms of the sheer numbers of policy documents freely available for study (Abbott, Shaw, & Elston 2004). Sampling of documents and of stakeholders was predominantly guided by the research aims and objectives but like the processes of any research study (Morse 1997), was to some extent a reflection of my own interests and concerns. This was contextualised via reflexive accounting (see Chapter 7) however, if someone else attempted the same study, they would undoubtedly make different choices. There were however certain safeguards in place: discussion and liaison with supervisors and colleagues; the process of 'stepping back'; and being guided to texts by other texts.

Although a broad range of interviewees were selected on the basis that they were able to discuss their own narrative accounts relating to primary care research policy, this was situated within a wider social and political context that allowed me to explore the impact of discourses over time. However, some caution is advised in interpreting findings where individual interviewees were cited, such as with representatives from nursing, non-clinicians and industry. These interviewees were selected as being well-placed to relate to wider structural contexts beyond their own immediate positions and the topic guide designed to facilitate this however, the potential limitations of one narrative account should be noted by readers in making their own interpretations.

Although a limitation of the study in some respects, these should not necessarily be seen as irresolvable problems arising out of the discursive approach adopted. Instead, they might be seen as important policy-related issues brought to light via a discourse analysis. For instance, the potential limitations of individual interviews reflected the possible difficulties in engaging with stakeholders within the policy process where there is an irresolvable balance to strike between representation, participation and productive capacity (Hoppe 1999; Milewa 2004).

It is worth noting that analysis proceeded with the benefit of hindsight. This may have facilitated a particular view of policy as it was not possible to focus on the identification of policy problems *in situ*. In addition, the use of artificial boundaries as a 'way in' to the data may have led to an over-emphasis on the temporal aspects of policy that may or may not have emerged had a different approach been taken. However this appeared to reflect the nature of policy discourse as a complex web of texts with no fixed point of entry.

ii) Transferability

As described above, the theoretical and methodological approach adopted provided a detailed and critical approach to identifying discourses and their impact on primary care research. In particular, the approach to sampling, the tools for data gathering (including the data extraction form and topic guide) and the overall analytic process appeared to lend themselves well to analysis of national policy *per se*. They provided a relevant and practicable approach to policy analysis that was theoretically situated and allowed for a range of perspectives to be revealed. As such it may provide a useful framework for

wider analysis of national policy. However, the in-depth, intensive analysis required over a sustained period of time may not make such an approach suitable to the needs and timeframes of policymakers or those seeking to respond rapidly to identified policy needs. In this case particular elements may prove useful such as the document extraction form.

In relation to findings, I have attempted to provide a detailed analysis that accounts for the decisions made and allows readers to situate themselves within the analysis, recognising themselves or others within descriptions and thereby aiding transferability. Given the breadth of texts studied in relation to science, government, research, primary care and healthcare more broadly, it is feasible that findings resonate with contexts outside of primary care and outside of the UK. For instance, given that health-related research is shaped by dominant discourses around science, economy and globalisation, findings might aid those in secondary or tertiary care in appreciating how their own institutions and practices are accordingly shaped and how they might best respond. But my intention has not been to provide some ultimate truth about health-related research policy. Indeed, having described myself as taking a weak social constructivist position, the process of 'making sense' that is presented here is intended as a means of explaining more about primary care research policy, in more detail, more coherently and more cohesively. By capturing a breadth of texts and ensuring abstraction of findings to a relevant theoretical framework, I envisage that this provides a 'more accurate' truth than some analyses of primary care research policy and the fragmented view presented in policy texts themselves.

12.3 Reflecting on primary care research policy

It is evident from the analysis presented that primary care research policy is not value-free but tied up with ideological views of what good research is; what knowledge society wants; what worthwhile knowledge is; and what government's and the public's role is in the production (and use) of such knowledge. These views and subsequent actions were shaped by the discourses at play.

Most recently, it appeared that the discursive vision of science that emphasised the development of a knowledge-based society (as opposed to a post-war emphasis on

large-scale industrial production) dominated health-related policy. This emphasised technological innovation in clinical, biotechnological, pharmacological and molecular research in particular as the key means of facilitating increased knowledge production and national competitiveness and, in turn, facilitating economic growth within globalised markets. In this context research was an object that government used to manipulate knowledge production, predominantly in support of such economic growth and global competition. With increased emphasis on economic growth and productivity, this also suggested that more critical research traditions associated with, for instance, sociology and psychology, would be situated outside such discourses. Forms of governance acted as a means of directing or controlling research subjects and practices that were required to sustain such a discursive framework. This was apparent in the active management of research (for instance, via UKCRC/N); increased focus on how and why things were to be done if they were to become credible; and constraints placed on what is worthwhile research.

The lack of inclusion of primary care research in such policy representations was a key finding. It raises questions about whether this equates to dissolution of power and influence (i.e. a share of power is transferred to others), or represents a sign of maturity and acceptance (i.e. that primary care research is subsumed in the wider context of health-related research and becomes part of wider power relations). Findings suggest the later: as evidenced by the strategic discourses employed. The impact on primary care research has been an emphasis on the *system* of primary care that is positioned as a resource for clinical trials work, as opposed to a breadth of *research* work reflecting the interdisciplinary and patient-centred nature of primary care.

Arguably, much of the evidence required by primary care clinicians can only be obtained by conducting research involving primary care teams and their patients. It has been well-documented that this requires a suitable knowledge base that is not extrapolated from research findings undertaken in acute settings to the community (see Appendix 2); and also necessitates a body of appropriately trained researchers in primary care; none of which were explicit priorities within research policy in the post-Mant era. This points to a major tension in government policy that on the one hand seeks to shift (and extend) healthcare out of hospitals and into primary and community settings (not least due to the reduced costs this might entail in the longer term); and on

the other has moved away from supporting situated knowledge relevant to developing a knowledge base for care practised in such settings. Furthermore, current research policy assumes particular practices based on a high-turnover model where large numbers are recruited to research and suggesting epidemiological dominance as opposed to (or alongside) interpretive understanding. Based on a biomedical model that characterises patients in relation to illness or injury, it largely reduced research involvement to numbers recruited into clinical trials. To facilitate this model, the NHS has been objectified as a test bed for clinical research practices.

a) The relevance (or otherwise) of utopia

The reference to utopia in the title of my thesis is drawn from the work of Ralph Dahrendorf (1958). Although I do not subscribe to the wider combination of Marxist and Weberian theories on which his work is based, nor do I claim to be an expert on utopian theory *per se*; the notion of reorienting a utopian perspective is a potentially useful one. He claimed that there would always be conflict between those with authority and those without; and thought that the central conflict in all social institutions concerned the distribution of power and authority that produced antagonistic interests (Dahrendorf 1958; 1959). Following from this, the notion of utopia is not fruitful in that it denies such conflict; or, from a poststructural perspective, the existence of power and the means by which it is shaped and exercised. Furthermore, challenging utopian theory also facilitates recognition of the social, historical and political contexts in which research policy develops. Hence the implications of moving 'out of utopia' are to acknowledge that society is based around values and norms; that power is all around us; and that everything is subject to change.

As presented in chapter 7, on the face of it the *Mant Report* represented a consensual utopian world of primary care research characterised by multidisciplinary groups, networks and practices. The breadth of research subjects and practices captured within the report suggested the need for a sound knowledge base to support primary care but, beyond an argument that the lion's share of resources allocated to secondary care was a potential source of support for primary care research, there was no explicit acknowledgement of the tensions between individuals, professions or healthcare contexts. Although the report facilitated unparalleled opportunities for the development of primary care research, discourse analysis facilitated a more in-depth and critical

appreciation for the construction of the document and the field of relations in which it was situated. In an effort to justify primary care research it aligned with dominant discourses of government bureaucracy, economy and clinical medicine and presented an homogenous version of primary care research that denied relations of power. In this sense, the *Mant Report* (and subsequent documents) was forced into defining primary care research at the margins[216]. A number of writers have drawn attention to the breadth of theories, methods, services and activities, disciplines and professions associated with general practice and/or primary care (Balint 1957; Starfield 1992; Marinker, 1998; Lewis 1999; Heath 1997, 2000; Charles-Jones, Latimer & May 2003; Carter & Elwyn 2003). This breadth and comprehensiveness has made it especially difficult to define and describe (Heath 1997, 2000; Marinker 1998). What follows from this is that, as primary care research has been forced to define itself in relation to policy discourse, so it has been reshaped or redefined in ways that negate this breadth.

The new research infrastructure shaped by dominant discourses of science, corporatism and economy appeared to have sidelined research questions that arise in the clinical encounter, about patient experiences. Indeed, reductionist pressures that situate people within molecular or population levels of analysis have been spectacularly successful during the 20th century, whereas the integrating disciplines that study people in context have had to struggle to achieve recognition. However other starting points (for instance, different clinical settings, encounters, entry points into the system and so on) are possible that may lead to differently conceptualised areas of research. Arguably the diversity of methods and approaches embodied in primary care research - along with an interest and expertise in evaluating complex interventions - provides a greater insight into health, illness and disease-related issues than a focus on clinical issues assessed via clinical research and trial methodologies alone.

As dominant discourses began to have a greater influence on primary care research policy, so tensions began to emerge and so primary care research began to be ideologically constructed and assessed in relation to such discourses, encouraging it to align with dominant measures of 'success' related to value for money, internal

[216] This is influenced by the work of Rudebeck (1992) who discusses the nature of general practice and suggests that it has been forced to provide a comprehensible definition of itself that denies the very breadth of generalism.

relevance and so on. This led to an internalisation and normalisation of particular institutional arrangements for, and approaches to, research. This in turn has led to a move away from individual creative activity to an organisational, managed focus, where primary care research institutions engage willingly in regulatory structures and audit technologies and where researchers are increasingly rendered productive by new managerialist processes.

In this context, primary care research played an active role in defining itself at the margins. This has brought tensions to the fore, not least in the difference between the view from the DH and general practice (that refer to a watering down of primary care research, aspire to the dominant measures of success, and contribute to dominant power relations that determine worthwhile knowledge production); and those embracing broad multidisciplinary research (that might consider success outside of such frameworks).

This suggests a tension between general practice and primary care more broadly that failed to be explicitly acknowledged or incorporated within policy. Such tension may be problematic in that general practice and primary care can be seen to embody a number of competing discourses: whereas general practice draws its authority from roots in clinical medicine, primary care encompasses a broad range of both clinical and non-clinical groups and practices, and whereas general practitioners might be seen to represent a core part of the primary care team they are also often employers of people and contractors of services undertaken by other members of the same team and thereby potentially introduce employment discourses into healthcare practices. This presents conceptual problems in conceiving of policy-related problems and also practicalities of identifying who best represents – or is able to speak on behalf of – primary care. Such tensions might best be openly acknowledged, debated and addressed rather than masked by a utopian view of relations.

This indicates the multiple perspectives that discourse analysis has uncovered; demonstrates that there are alternative means of conceptualising and doing primary care research outside of that constructed by dominant discourses; and reminds us that resistance and change are always possible. Given the employment status of GPs and their apparent 'acceptability' in the eyes wider policy stakeholders, general practice may be well-positioned to achieve such change. Whoever is able to pursue this, perhaps a

'constructive conversation' (Marinker 2006) is first required about the basis for political challenge, the representation of primary care and how best to cope with the (potentially productive) tensions that bubble under the surface.

My last point is not so much based on the findings of my research but on the process of undertaking it. As the above discussion indicates, this has led me to become more aware of the political, social and historical context in which my research takes place and practices are adopted. Through this has emerged a realisation that other researchers like myself (and I include the gamut of medical, clinical and non-clinical researchers here) are situated in a political and historical vacuum and unconsciously reproduce dominant power relations that may or may not serve them well (individually, professionally and/or institutionally). From the perspective of a primary care researcher, comprehension of the means by which research is governed and shaped by wider social and political relations also raises the potential to be able to challenge and resist it. Appreciation of different versions of history may also stimulate productive tensions and constructive conversations about primary care research policy. It would be arrogant of me to suggest that my research holds the key that might facilitate such conversations (and I do not wish to situate my own perspective as somehow more 'knowing' than others) but the process of undertaking this work has gone some way to persuading me that (by whatever means) those positioned within primary care research need to more fully appreciate this process and ensure a conscious use of language in order to position and legitimate primary care research within policy.

12.4 Summary

This final chapter has presented a critical analysis, not only of the main findings of my research, but also of the overall approach adopted. I have advocated approaches to policy inquiry grounded in social constructivism and highlighted the discursive framework presented here as a fruitful means of analysing national policy. I have reflected on the tensions inherent with primary care research policy; externally in terms of the need to react to wider policy discourse; and internally in relation to the multifarious nature of primary care. Lastly, I have suggested that a fruitful means of proceeding is to learn to live with such tensions as opposed to advocating a utopian

view of primary care research that denies its very nature and the power relations within and around it.

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APPENDICES

Appendix 1: List of abbreviations

Acronym	Term / phrase
AMS	Academy of Medical Sciences
AUDGP	Association of University Departments of General Practice (previously known as Association of University Teachers in General Practice (AUTGP), now known as the Society of Academic Primary Care (SAPC))
BBSRC	Biotechnology and Biological Sciences Research Council
BIGT	Bioscience, Innovation and Growth Team
COREC	Central Office of Research Ethics Committees
CRC	Clinical Research Collaborative
CGP	College of General Practitioners
CST	Council for Science and Technology
CVCP	Council of Vice Chancellors and Principals (now known as Universities UK)
DTI	Department of Trade and Industry
DRD	Director of Research and Development
DHSC	Directorates of Health and Social Care (replaced the previous eight NHS Executive Regional Offices)
EBM	Evidence-based medicine
EBPP	Evidence-based policy and practice
HEFC	Higher Education Funding Council (previously University Grants Committee)
HoDs	Heads of Department (of Academic Primary Care)
IP	Intellectual property
LRN	Local Research Network
MRC GPRF	Medical Research Council General Practice Research Framework
MISG	Ministerial Industry Strategy Group
NCRN	National Cancer Research Network
NCRI	National Cancer Research Institute

NHS	National Health Service
NHS E	National Health Service Executive
NIHR	National Institute for Health Research
NpfIT	National Programme for Information Technology
OST	Office of Science and Technology
PICTF	Pharmaceutical Industry Competitiveness Task Force
PCG/T	Primary Care Groups and Trusts
PCRN	Primary care research network
PCRN-E	Primary Care Research Network for England
RAE	Research Assessment Exercise
RCGP	Royal College of General Practitioners (formerly College of General Practitioners)
RCN	Royal College of Nursing
RDSU	Research and Development Support Unit
REC	Research Ethics Committee
RLG	Research Liaison Group
RPB	Research for Patient Benefit
SERC	Science and Engineering Research Council
SET	Science, engineering and technology
SDM	Shared decision making
SIFTR	Service Increment for Teaching and Research
SMEs	Small and medium enterprises
SAPC	Society of Academic Primary Care
StHA	Strategic Health Authorities
UKCRC	United Kingdom Clinical Research Collaborative
UKCRN	United Kingdom Clinical Research Network
UK FPCRO	UK Federation of Primary Care Research Organisations
WDC	Workforce Development Confederations

Appendix 2: Overview of primary care research policy

A2.1 Introduction

To understand the effects of the shifting conceptualisations of primary care research, it is necessary to examine the emergence and acceptance of the social and institutional arrangements supported by these. This chapter therefore introduces the broad subject of primary care research, including consideration of the terms and language used; a description of some of the key organisations, reports and policies over time; and wider developments relating to research policy, health and government. A detailed analysis is then presented throughout the findings section. A chronology of events is also included in Appendix 3.

A2.2 The nature of primary care

Since the Alma Alta Declaration in 1977[217], World Health Organisation member states have been formally committed to a policy of developing primary care services (Petchey 1996). However, there is no simple definition of primary care, with major professional differences rooted in different philosophical approaches to individual and population-based healthcare (Atun 2004; Petchey 1996; Ross, Vernon, & Smith 2002; Starfield 1992; 1994). Hence, the term is fraught with difficulties and the exact scope and definition continues to be debated across the world.

Lay people treat most minor illness themselves but, within healthcare settings, most minor illness is treated entirely by family doctors and their teams and most serious disease presents first in primary care (i.e. services provided via general practice, community dentistry, high street optometry and community pharmacy). As a level of care within the health system, primary care is therefore the domain where people *first* contact the healthcare system (other levels being secondary and teaching hospitals). Primary care therefore has a broader role than merely gate-keeping – as has been

[217] The centrepiece of the Declaration was primary health care regarded as key to attaining the goal of Health For All by the year 2000 and as an equitable, consumer-centred approach to health services that is able to address underlying social factors that influence health.

suggested (Starfield 1994) - and is well-positioned to co-ordinate care across a range of services. It is therefore located at the heart of NHS decision making.

In the UK, following a shift in the way in which services were conceived and delivered (Department of Health 2001d;Secretary of State for Health 1987;Secretary of State for Health 1996;Secretary of State for Health for England 1996), the concept of a primary-care-led NHS became everyday language, recognising that most patient interactions and most treatment is delivered through primary care. It is now widely claimed that over 90% of contact between the population and the NHS takes place in a community setting (Mant 1997; Royal College of General Practitioners 1999; Smith 1997).

a) Delivery and content of primary care

Primary care endeavours to address the most common problems in the community by providing preventative, curative and rehabilitative services. It attempts to do this through dealing with the social context in which issues around health and illness arise (Marinker 1998; May 2005), integrating care where more than one problem exists (Starfield 1992), deploying both basic and specialised resources for improving health (Atun 2004), and striving to assure equitable access and delivery of care (Campbell et al. 2001; Starfield 1992;1994). The set of activities devolved to primary care has continued to grow with a shift of some specialist outpatient and inpatient services traditionally based within hospital settings but increasingly provided for through, for instance, shared care, chronic disease management or hospital-at-home schemes (Atun 2004).

Primary care is delivered via a diverse set of clinical and non-clinical practitioners encompassing a range of disciplinary and professional backgrounds. This includes: general practice, nursing (including practice and district nursing), midwifery, health visiting, pharmacy, dentistry, community gerontology, optometry and the professions allied to medicine (physiotherapy, speech therapy, chiropody, dietetics, osteopathy and occupational therapy). Depending on the philosophical roots and the breadth of definition adopted, primary care may also include the activities of other professionals working in primary care including counsellors, social workers, school nurses or community psychiatric nurses or activities at the interface of primary care and other services such as accident and emergency care. A strong administrative team, including

dedicated practice managers, receptionists and medical secretaries, also supports primary care.

Although general practice is an integral part of primary care, the terms are not synonymous (Atun 2004). However, there has been a tendency for the two terms to be used interchangeably, with primary health care identified with primary medical care (Petchey 1996). This has led to accusations of a colonisation of primary care on the part of general practice (Ross 1999; Ross, Vernon, & Smith 2002), which, in turn, has conveyed a somewhat spurious sense of coherence (Lewis 1999). Instead, the means by which primary healthcare is delivered and by whom has changed considerably since the inception of the NHS, with an increasing focus on multidisciplinary and interprofessional working between, for instance, general practitioners, primary care staff, community and district nurses and health visitors. First promoted and studied in the 1960's, (Cartwright 1967; Jeffreys & Sachs 1983) the model of the primary health care team is now commonplace with a range of professionals now expected to work together as the unit of care delivery (Ovretveit, Mathias & Thompson 1997). But barriers to effective teamwork still remain, such as different professional cultures and ways of working (Griffiths, Austin, & Luker 2004; Pinder et al. 2005; PMS Evaluation Team 2002). Whilst general practitioners, as independent contractors, have remained in charge of their workload, nursing had, until recently, achieved little autonomy and remuneration. Broadly speaking, general practitioners have responsibility for making decisions about diagnosis, referral to secondary care and prescribing medication, as well as an increasing role in relation to the management of chronic disease (see section below). As primary health care workers other than general practitioners have become increasingly involved in the processes of screening, diagnosis and treatment (Department of Health 1996) and primary care nursing has expanded, so the division of labour in general practice and primary care has altered, with changing roles and responsibilities as the boundaries shift between professions and clinical tasks (Charles-Jones, Latimer, & May 2003; Riley et al. 2003)..

b) Developing a knowledge base for primary care

Primary care claims to be in a unique position in that those based within it are able to view the entire canvas of health, illness and medical care, as well as its social context. Research in this setting provides a means for testing and improving clinical practice

within primary care settings, exploring population data, improving the organisation of services and questioning beliefs or behaviours. In this sense primary care claims to be differentiated from other areas of research and cuts across other established research disciplines and traditions, as those involved are influenced by a wide range of disciplines - such as epidemiology, anthropology, sociology, psychology, philosophy, narrative and linguistics. Hence it requires the development of its own methods to address its own specific questions and needs, as well as its own structures for carrying out effective investigation (Mant 1997). Whilst most other realms of medicine continue to embrace largely positivistic perspectives and methods, research in primary care uses a diverse set of research methods to examine the breadth of social, psychological and physical encounters in such settings (Carter & Elwyn 2003).

It is for these reasons that much of the evidence required by primary care clinicians can only be obtained through research that is conducted in community settings and that involves primary health care teams and their patients. In particular, applied research focusing on the lived experience of illness in the context of daily life is most appropriately captured in the context of primary care. The primary care setting provides scope for exploring people's experience of disability, chronic illness, ageing and dying; investigating self-management and lifestyle change in conditions such as diabetes or asthma, as well as broad strategies for health promotion such as smoking cessation; and considering genetic disease from the perspective of at-risk family members. In addition, evidence to underpin, for instance, the diagnosis and management of headache, vomiting, fever, cough or diarrhoea cannot be informed *solely* by research undertaken in hospital or laboratory settings (Carter & Elwyn 2003; Mant 1997; Mant et al. 2004).

For primary care to develop as a long-term, sustainable system of care, it therefore needs to be supported by its own knowledge base. This is evident in the increase in the number of influential bodies of work relating to the prevention and to the diagnosis, management and monitoring of disease outside of hospital settings. For example, the first primary care based treatment trial of otitis media in children took place over 20 years ago (van Buchem, Dunk, & van't Hof 1981), with the results revolutionising clinical management of the disease in the Netherlands and a subsequent Cochrane review of general practice based trials of antibiotic treatment for this condition now provides the evidence base for clinical care internationally (Del Mar, Glaziou, & Hayem

1997; Mant et al 2004). Other examples of studies specific to developing primary care include the development and evaluation of complex health interventions (Bradley F et al. 1999; Greenhalgh 2005) and clinical decision making processes (Eccles et al. 2002); the development of strategies for smoking cessation (Silagy et al. 1994); the diagnosis and effective management of heart failure (Fuat, Hungin, & Murphy 2003) and adherence to blood pressure-lowering medication in primary care (Schroeder, Fahey, & Ebrahim 2004).

In primary care, research and development are therefore important for the development of new and existing knowledge and in influencing clinical practice and the care of disease seen only in primary care. In addition research undertaken in primary care settings has led to the development and assessment of effectiveness of preventative care (for instance in exploring strategies for cardiovascular screening (Wood et al. 1994)) and it has added to the early diagnosis, monitoring and long-term care of chronic conditions (for instance in devising monitoring strategies (Glasziou, Irwig, & Mant 2005)).

However, the nature of research and what this involves (in primary care and elsewhere) continues to be discussed and debated. Broadly speaking, research reflects the human desire to acquire and analyse knowledge (Shaw, Boynton, & Greenhalgh 2005). This can take many forms, for instance a manager might review attendance figures at an asthma clinic with a view to changing clinic times to increase accessibility; a public health consultant might study data on the incidence of breast cancer in her locality following the introduction of mammography screening; or a social scientist might analyse the messages from a public access Internet discussion about the safety of vaccines. In *theory*, all these activities might be perceived as research but whether or not this is the case will depend on the specific question being addressed; the method(s) chosen to address the question; the context in which the work takes place; the nature and depth of analysis and interpretation; and the plans for publication and the use to which the findings will be put (Shaw, Boynton, & Greenhalgh 2005). However, in *practice*, much contemporary research is of an inherently fuzzy nature with projects often difficult to classify even with explicit written guidance (Wade 2005). For example, many types of applied research (such as action research (Greenhalgh, Collard, & Begun 2005), evaluation of services (Riley et al. 2003), evaluation of teaching

(Hearnshaw et al. 2004) and quality improvement research (Lo & Groman 2003)) seek to generate new knowledge as well as providing direct benefits to patients and practitioners locally.

The opportunities for primary care research are great, but as a field of research, it is still relatively under-explored and is widely regarded as a newcomer by many researchers from other disciplines (Carter & Elwyn 2003). The roots of primary care research are firmly based in the general practice tradition, where research has been influenced by the nature of the task at hand. This is illustrated in the quotation on page 14. The social, psychological and physical complexity of encounters within such primary care settings that this quotation suggests, means that research in this area is quite different to that undertaken exclusively in hospital clinic settings. But primary care research is by no means a unitary phenomenon and, as in primary care itself, has increasingly embraced a range of professionals and activities, both clinical and non-clinical. This has ensured a broad portfolio of research both *in* and *on* primary care including: research initiated in primary care (where at least one principle investigator is a primary care professional); research initiated by others (but where patient recruitment and data collection is mainly carried out in primary care); and research initiated and carried out by others (but relating specifically to the activities of primary health care professionals). Hence, as well as research being undertaken by those directly involved in the delivery of primary care, research in this setting is also undertaken by, for example, other clinicians (such as those based in secondary care and interested in exploring the interface with primary care), non-clinicians (usually, but not always, based outside of primary care settings such as social and behavioural scientists, statisticians and economists) and a range of organisations (such as research networks and/or consortia of practices, charitable organisations, academic departments, NHS Trusts, pharmaceutical companies and privately run research firms).

Given the diverse nature of primary care, it is essential that research in this area involves collaboration between individuals and teams with different disciplinary backgrounds (Mant 1997). From this perspective the whole primary care team needs to be involved in research, from planning and application through to performing research and interpreting findings (Smith 1997). Primary care practitioners have been actively encouraged to become involved in research (Carter Shaw, & Macfarlane 2002; Mant

1997), reflecting wider changes in provision of primary care by teams and bringing different skills and talents to the research endeavour in this setting (Beyea & Nicoll 1998). This has begun to dispel the myth that primary care research is an individual GP pursuit, with other members of the primary care team now taking a more active role, including practice nurses, dedicated research nurses and practice managers, as well as members of the extended primary care team (Campbell et al. 1999). However, with divisions of labour typically reflecting the dominance of the general practitioner independent contractor status over other employed staff, the delineation of research roles within primary care settings may reflect such employment arrangements revealing, for instance, different perceptions of research across primary care team members and the creation of research hierarchies in practices hosting research, with general practitioners often leading decision making and nurses undertaking much of the groundwork (Shaw et al. 2005).

Within primary care (and healthcare generally), research needs to be considered in the wider context of quality improvement and clinical governance, changing practice and the drive for improvements in patient care. The development of primary care research should also be considered in relation to policy on primary care and health care systems more generally, evidence-based decision making (in relation to clinical encounters, as well as health-related policy processes), accountability and performance management and changes in the workforce. However, little has been done to investigate research policy and the range of factors that potentially affect its development and implementation. The sections below therefore provide a brief overview of the organisation of UK primary health care, of research and related policy in England. An overview of the key changes that have contributed to this development is provided in Table A1.

Table A1: Overview of organisational changes relating to primary care, research and policy

	Historical, social and political change	Policies	Professional	Academic / university	Organisation of general practice
Pre-1980's			General practice training	MRC General Practice Research Framework	College of General Practitioners established Balint movement
1980's	Thatcher government Rise in performance management & culture of accountability	Working for Patients	On-going development of 'generalism' as 'specialty'	Early origins of Research Assessment Exercise	
1990	Evidence-based medicine as a social movement	NHS R&D Strategy Culyer funding	Primary care-led NHS	RCGP Research Practices	New GP contract Fundholding
1995	Labour government elected	NHS Consumers Support for Research Primary Care: Delivering the Future Mant Report Clarke Review	Developing emphasis on 'targets' Clinical governance	MRC Topic Review National Programmes (SDO, NEAT, HTA & Policy Research) Growth of nursing / applied research	Total Purchasing Growth of multidisciplinary primary care teams Personal Medical Services Primary Care Trusts
2000	Bristol enquiry Shipman enquiry	NHS Plan R&D for a First Class Service NICE	Clinical Networks National Service Frameworks	Research governance	Development of structured chronic disease management models
2005	New Labour re-elected, and change to inner party circle	Patient choice Consultation on new NHS R&D Strategy	UK Clinical Research Collaborative / Network	Primary Care Research Network for England	Quality Outcomes Framework

A2.3 Early influences: general practice, primary care and research

Plate A1: Will Pickles, First President of the College of GPs

Health related research, and its application to practice, has a long history. For instance, it was in the 1920s that a concordat developed between the Medical Research Council and Ministry of Health about their relative spheres of interest (McLachlan, 1978). Ad hoc research activity continued across a number of healthcare settings, including general practice, in which primary care has its roots. For instance Will Pickles demonstrated that world class research could be done entirely outside of the hospital environment by tracing the spread of infectious disease within his practice population (Pickles 1939). Other examples of early research pioneers within primary care are given in Table A2 below, including Joseph Collings (whose research was the first to be undertaken *on* general practice, *in* general practice and *by* a general practitioner) and John Fry (known particularly for describing the profiles of disease). Such early pioneers were important in making research a reality to the general practice endeavour and, although high quality results were achieved, much of the work of research was initially descriptive in nature (relating to, for instance, practice organisation and staffing).

The inception of the NHS in 1948 underlined the essential role of general practice in sustaining an affordable and publicly funded health service. Such developments formed part of a fundamental post-war re-evaluation of society, of which academic general practice and primary care is a product. It facilitated a challenge on the part of general practitioners to the adequacy of their medical school training, which had, until then, focused entirely on bio-technological aspects of medicine (Marinker 1998). In seeking new insights from beyond clinical medicine, the language and practice of general practice has been influenced by diverse fields including: epidemiology, sociology, social psychology, psycho-analysis, management theory and political philosophy. Around the same time, the College of General Practitioners was founded, in 1952, immediately concentrating on research and forming a dedicated Research Committee

(Carter & Elwyn 2003). Arguably, the work of Joseph Collings was crucial at this time in pushing for a corporate identity for general practice (Collings 1950) (Petchey 1995).

Table A2: Examples of Research Pioneers in General Practice and Primary Care

Era*	Researcher	Research area
18th	William Budd	Epidemiology and spread of typhoid
19th	James Mackenzie	Deciphering abnormal cardiac rhythms
20th	Will Pickles	Epidemiology; infectious disease
20th	Keith Hodgkin	Clinical epidemiology
20th	Edgar Hope-Simpson	Epidemiology of infectious disease
20th	John Fry	Morbidity of common disease
20th	Ian Watson	Epidemiology and infectious disease
20th	Tudor Hart	Epidemiology of hypertension
20th	Joe Collings	Ethnography and the consultation
20th	Nicky Cullum	Primary care nursing research
20th	Anne Cartwright	Communication in the consultation
20th	John Howie	Patient enablement
20th	Marshall Marinker	Patient centred medicine in primary care
20th	Ian McWhinney	Patient centred medicine in primary care
20th	Shah Ebrahim	Epidemiology of aging
20th	Nicky Britten	Qualitative research
20th	Ann L Kinmonth	Complex interventions
20th	Martin Roland	Quality improvement and measurement
21st	Trisha Greenhalgh	Narrative approaches to primary care research
21st	Yvonne Cater	Organisation and management of primary care research
21st	Paul Little	Pragmatic trials addressing common general practice problems and their social context
21st	Carl May	Socio-technical approaches to primary care IT systems
21st	Martin Marshall	Cultural aspects of developing primary care organisations
21st	Tom Fahey	Application of clinical epidemiology to primary care decision making

* This is intended only as an indication of the era in which research has taken place. Individuals involved in research in the late twentieth and early twenty-first centuries in particular have tended to cross over this time span.

Throughout this period the discipline of general practice experienced a crisis of identity. The publication of *The Future General Practitioner*[218] (Horder et al. 1972) in 1972 marked a watershed for the discipline with a move away from a predominantly instrumental and reductionist hospital oriented medicine and concern with major

[218] The Future General Practitioner was produced by a working party of the Royal College of General Practitioners. Both before and after publication, its authors – John Horder, Pat Byrne, Paul Freeling, Conrad Harris, Donald Irving and Marshall Marinker – have been pro-active in developing and leading general practice as an academic discipline.

diseases encountered in the wards of university teaching hospitals (Marinker 1998). This was heavily influenced by the Balint movement and the shift of the doctors gaze towards the patient, rather than disease, as the focus of the medical encounter:

> "...the general practitioner's clinical concern was readjusted, first from the diagnosis of disease to the meaning of the illness, second, from the illness to the patient, and, third, from the patient to the doctor-patient relationship." (Marinker 1998:14)

The focus on the patient in general practice owes a debt to Balint's insights into the nature and effect of the relationship between patients and clinicians, which was a trigger for an extensive research tradition that continues to examine the interpersonal interactions within clinical consultations. The consultation has formed the basis of a major research interest and is a field where primary care has dominated the research effort. These ideas helped to develop one of the most fundamental concepts underpinning twenty-first century primary care: that of patient centredness (Carter & Elwyn 2003).

Academic general practice began to flourish during the late 1960s and early 1970s as the content of general practice came to be regarded as an academic discipline (McWhinney 1966) and a university-based niche began to be established. Early priorities centred on developing a teaching base (Carter & Elwyn 2003) and it was only after this foothold was secured that the research agenda really began to be addressed. The 1970's and 80's then brought a growing awareness of the links between clinical practice, education and research. However, the Mackenzie Report (Howie, Hannay, & Stevenson 1986) indicated that it was possible, but difficult, for academic general practitioners to undertake research in the early 1980s as there was no tradition of research in basic training and heavy teaching and clinical responsibilities severely restricted time available to plan or undertake research activities.

Throughout the 1960's and 70's, a number of joint Department of Health and Medical Research Council funded centres and projects were beginning to develop in community health settings, providing the building blocks for expansion. Of particular note was the establishment of the Medical Research Council General Practice Research Framework (MRC GPRF). Set up in the early 1970s, the GPRF was originally established to facilitate a trial of mild hypertension, involving 176 general practices. The complete project, from pilot to publication, took 12 years and all practices completed the trial, with nurses screening 500,000 patients and randomising 18,000. At the time patient screening programmes were rare and practice nurse-run clinics were a new approach to patient management. Central co-ordination (via the GPRF) and the involvement of practice nurses were identified as key factors in the success of the trial (Vickers, Hand, & Hand 1999).

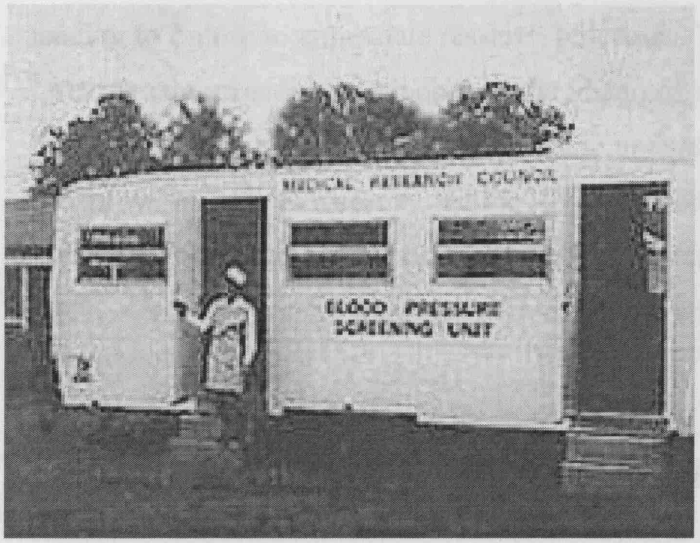

Plate A2: A screening unit used by the MRC General Practice Research Framework

Photograph by permission of the MRC General Practice Research Framework

The potential for future research in epidemiology and general practice was quickly recognised, with the GPRF becoming a designated national resource accessible to all researchers from 1986. It has developed and expanded further since this time with additional recruitment drives as required to ensure as wide range of practices are involved (Vickers, Hand, & Hand 1999). The GPRF has been influential in encouraging this type of research activity within primary care settings (Carter, Shaw, & Sibbald 2000;Thomas et al. 2000). It is now based within the MRC Clinical Trials Unit and has a network of over 1100 member practices across the UK (Vickers 1999).

Throughout the 1960's and 1970's there was sporadic debate over the need for policy or policies dedicated to NHS research. This intensified once the need for evidence to inform both policy decision making and clinical practice became more clearly

recognised in the 1970's (McLachlan 1978). Of particular note was a report by the Lord Privy Seal, published in 1972, which advocated the development of the NHS as a commissioner of research and led to the introduction of a customer-contractor principle for applied research (Lord Privy Seal 1971). Complex implementation was combined with a lack of capacity and research capability within the Department of Health[219] leading to failure to appreciate research processes. This in turn led to the issue of broad research commissions as opposed to the vision of targeted projects (McLachlan 1978). In the long term such arrangements became untenable and, combined with doubts over the future of medical research, led the House of Lords Select Committee on Science and Technology to instigate a special committee to address priorities in medical research in 1988, which informed subsequent debate and arrangements (Department of Health 1989; 1991).

During the 1980s, under the auspices of the Thatcher government, health service organisation became a major focus of policy and public discussion in which concern about resources was countered by a search for organisational and managerial solutions. NHS reforms of the late 1980's were brought about by increasingly costly bio-technology, rising public expectations and increasing morbidity associated with greater survival in old age (Marinker 1998). Changes focused on the delivery of services, which were intended to become more efficient through the creation of an internal market for healthcare. This led to a separation of the responsibility for purchasing and providing services, thereby creating competition between hospitals and other service providers (Ham 1992). Reforms led to greater explicitness - in diagnosis, treatment, outcome and entitlements - which was presented as self-evidently desirable (Marinker 1998).

The White Paper *Working for Patients* (Secretary of State for Health 1989) also aimed to strengthen management arrangements, building on earlier reforms from the Griffiths review of 1983 and the subsequent introduction of general management within the NHS, as well as *Promoting Better Health* (Secretary of State for Health 1987), which proposed a number of changes for primary care, including a new contract for GPs. Together these changes engendered a push for greater accountability of doctors' performance with general managers beginning to play a greater part in the management

[219] At the time, the organisation was known as the Department of Health and Social Security.

of clinical activity. Hence for the first time the relationship between the state and clinicians in general practice became characterised by economic factors and centrally defined controls, giving rise to a culture of accountability and performance management:

> "Targets were set that referred to rates of performance – for example in childhood immunisations, screening for cervical cancer, prevention of coronary heart disease, measurement of health status in old age and so on. These targets directed the doctor's gaze away from the individual patient to the population, and, with this shift, came the threat of de-focusing or loosening of the personal, implicit contract with the patient, as the public, explicit contract between the doctor and the state was tightened." (Marinker 1998:35)

This ethos of accountability was, in turn, influential in developing new systems for assessing and managing research activity. In particular, the introduction of the Research Assessment Exercise (RAE) in the late 1980's was a major step in systematising the research endeavour: by assessing the quality of research in universities and colleges in the UK every few years, the RAE provided a means of enabling the higher education funding bodies to selectively distribute public funds for research. The system for assessment of academic research across all disciplines via quality ratings has been subject to major debate and scrutiny over the years and has undergone extensive review. In particular, debate related to the appropriateness of an outcomes based model of assessment and the lack of consideration of incentives to undertake research across the NHS / university divide within the quality control methods adopted (Harrison & New 2002).

A2.4 Formalisation of NHS research & development (1990-1996)

The organisation of health services in this period continued to be influenced by the earlier reforms introduced under the Thatcher government (NHS and Community Care Act, 1990). The underlying aim was to encourage greater cost control and efficiency at the point where many key decisions were being made (i.e. in primary care), as well as attempting to influence the services provided in general practice through, for example, the national general practice contract. Under new arrangements for fundholding – and its later variants of community fundholding, extended fundholding and total purchasing - large general practices were able to become purchasers of some hospital services for their patients, thereby increasing general practitioners' influence over secondary care

and providing modest incentives to shift hospital care to less costly community settings (Dixon & Mays 1998). By 1995, around half of the practices eligible had been recruited to the scheme (Petchey 1996), but a systematic evaluation of the scheme was never commissioned, making it impossible to judge overall success beyond the crude indicator of expansion across practices. Indeed, criticisms of fundholding arrangements focused on concerns that, although money followed the patients, fundholding practices might have discriminated against patients who were older, sicker or more expensive to treat and that general practitioners may not have sufficient experience of managing budgets.

The focus on economics as the moral basis for rationing healthcare began to encourage development of a target-based culture and, as a result, uncertainty became less permissible within healthcare organisations and encounters. This facilitated a move by the medical profession towards science-based clinical practice where choices made could be justified on the basis of sound statistical evidence. Work had been progressing in this area for some time: with roots in clinical epidemiology, those such as Dave Sackett and colleagues at McMaster University in Canada sought to demonstrate the value of reliable quantification as an aid to clinical decision making:

> "As the criteria for diagnosis and treatment were increasingly to be determined by combing the world research literature, and adducing best evidence, a growth industry was created in the production of clinical guidelines, protocols (strict criteria for diagnosis and choice of action) and algorithms (the setting out of this information in the form of branching logic or decision-making 'trees')." (Marinker 1998:36)

This facilitated a repackaging of clinical epidemiology into the Evidence Based Medicine (EBM) movement (Evidence Based Medicine Working Group 1992), seeking to evaluate treatments according to strict, explicit criteria[220]. But it also brought with it immense anxiety. Combined with government policy and contractual obligations, it was feared that guidelines might encourage mechanistic and reductionist thought to the detriment of sensitivity to the needs of individual patients; and that, whilst guidelines promised to reduce the wide variations in clinical practice, the means for clinical decision making would be found only in evidence of a particular kind - that deriving from rigorous randomised controlled trials – and to the exclusion of other sources. But

[220] Being based on the fundamental premise that the efficacy and safety of interventions should be assessed in population-based research studies using the tools of objective scientific measurement, with special status accorded to the randomised controlled trial (Greenhalgh, 1998).

this emphasis on evidence-based practice, along with increasing links between primary care research and education and training, also meant that greater numbers of primary care professionals gained an interest in research and how to do it.

The development of an NHS programme dedicated to research and development has been relatively recent. Following the 1988 House of Lords Select Committee report on priorities in medical research, the first Director of Research and Development (DRD) - Michael Peckham - was appointed within the Department of Health in 1990 leading to the development of a formal NHS R&D strategy (Department of Health 1991), based on the premise that solutions to health problems necessitate contributions from a broad range of sectors and disciplines (Peckham 2000).

Initial development of the strategy focused largely on research undertaken in secondary and tertiary care, with primary care identified as a defined area for research funding or capacity building several years later. Following an independent review of research units supported by the Department of Health in 1992, a decision was taken to pilot a number of larger centres. The first was the National Centre for Primary Care Research and Development, which opened in 1995 at the University of Manchester after a competitive bidding process. The Centre has since expanded considerably with a broad portfolio of work focusing on organisations, quality, self-management and workforce. Hence, to some extent, it has helped to strengthen the skills base within primary care research, encouraged a coherent approach to the area and helped to strengthen the discipline as a whole (Peckham 2000).

Around the same time, the NHS R&D programme sought a means of creating a separate funding stream for research in order to protect and co-ordinate NHS support and avoid disinvestment in the area by health authorities. Although not aimed at primary care *per se*, the resultant Culyer Report (Research and Development Task Force 1994) was key in bringing about this change and a subsequent development of a primary care research culture. The remit of the Task Force included examining funding of NHS research and determining whether mechanisms for this could be improved. It led to a new strategy being developed for NHS R&D funding and to raised expectations of new R&D support for NHS providers, including those based within primary care.

Professor Culyer perceived that much research in the NHS, especially that done outside teaching hospitals, was unrecognised. The report recommended that all money spent on NHS R&D should be brought together into a single funding stream and that primary, secondary and acute sectors should have equal access to funding for R&D[221]. Although these arrangements have now been superseded (Department of Health 2000a;Department of Health 2000b), they allowed for the development of primary care research on a much wider scale and, in particular, for research practices and other organisations to grow in terms of their infrastructure and research activity. The arrangements were implemented throughout 1995 and 1996.

Plate A3: Mountsandel Surgery (N. Ireland), one of the first RCGP Research Practices

Photograph by permission of the RCGP Research Office

Research general practices have been identified as key to developing increased capacity (Kernick, Stead, & Dixon 1999) and their development has allowed individual primary care teams to become more involved in research at a variety of levels (Carter & Elwyn 2003). The first 'dedicated' research practice in the UK was appointed by the Royal College of General Practitioners in 1994, which provided limited financial support to cover infrastructure costs (Sibbald & Dowell 1998). Practices were involved in a range of activities such as involvement in community-based pharmaceutical trials or working in collaboration with local university departments or with acute or community hospitals (Carter & Elwyn 2003). An exploration of the relationship between research and education in such settings also indicated that around 15% of research practices were actively involved in both (Gray et al. 2000).

[221] The report also recommended that a compulsory levy be taken from the budgets of all health care purchasers to be put forward into the funding stream, which became divided into Budget 1 (also known as Culyer Funding), providing support for NHS R&D undertaken by providers; and Budget 2 providing support for the NHS R&D programme (mainly research project grants and capacity development).

Following the lead of the Royal College of General Practitioners, several NHS Executive Regional Offices funded research practices and more were then funded nationally through the Culyer awards (Research and Development Task Force 1994) (see above).

Changes in the structure and organisation of primary care provided greater emphasis in developing team working within this setting. Primary care was always envisaged as an interdisciplinary activity and the need to assure efficiency lent greater credibility to extending the roles of other practitioners within the primary care setting. Organisational change brought about through the development of clinical governance served to bring extended groups of professionals together to offer shared provision of primary care services and encouraged a transformation of ways of working, attitudes and systems within healthcare more broadly. For changes to occur, this has required teams to become more multidisciplinary and with a clear understanding and sharing of information.

This growth in team activity has also been reflected in research. For instance, the MRC GPRF continued to grow with both general practitioners and nurses becoming increasingly involved in collaborative research activity; and a number of primary care research networks beginning to develop with a focus on primary care, rather than general practice alone. This marked the beginning of an era of expansion.

A2.5 Modernisation and reform under Labour (1997-2000)

The Labour government elected in 1997 adopted quality as a major theme for health and outlined a programme of modernisation and reform, discarding the previous model of the internal market[222]. This programme proposed a new model combining clinical judgement with clear national standards to be delivered via a new National Institute for Clinical Excellence (NICE), established in 1999 as an independent organisation responsible for providing national guidance on the clinical and cost effectiveness of new and existing technologies[223]. The organisation has produced a wide range of clinical guidelines such as that on chronic obstructive pulmonary disease, which looks at

[222] The Government first set out its overall agenda for improving the quality of NHS healthcare in the White Paper: *The new NHS modern and dependable* (Secretary of State for Health, 1997). More detail followed in *A First Class Service* (DH, 1998).

[223] Including pharmaceuticals, diagnostic tests, surgical procedures and other treatments.

management across the interface between primary and secondary care. On 1 April 2005 NICE joined with the Health Development Agency (formerly responsible for developing the public health evidence-base) to become the new National Institute for Health and Clinical Excellence (also known as NICE) and expanding its remit to ensure health promotion and the prevention and treatment of ill health.

Conceived and implemented by the Labour government, clinical governance aimed to continually improve the overall standards of clinical care in the NHS and to reduce unacceptable variations in clinical practice. The key components of the clinical governance programme included continuing professional development, risk management, tackling poor performance and developing clear lines of accountability for the quality of care. Hence, an important aspect of the clinical governance agenda was seen to be the development and use of clinical guidelines (though this should be seen in the wider context of organisational development). Hence, the government developed a series of National Service Frameworks (NSFs)[224] to assist with delivering this agenda to ensure high quality care across the country and reduce unacceptable variations in the NHS (Department of Health 1998). The NSFs were developed as an accompaniment to the introduction of NICE, setting new national standards for the delivery and monitoring of services founded on a solid base of evidence, with flexibility for local implementation.

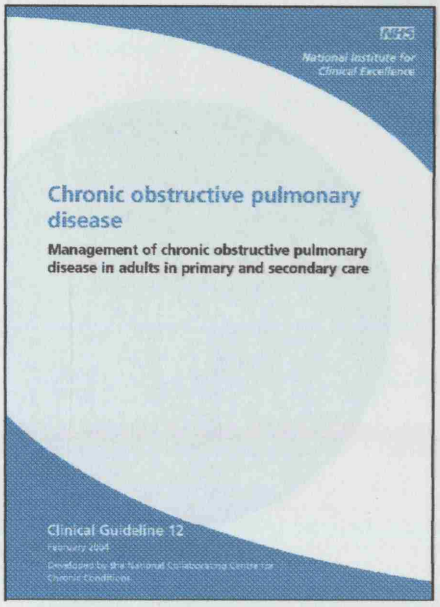

Plate A4: An example of NICE clinical guidelines

Although changes in the structure of the wider healthcare system have been vital to the development of primary care research, they have also been accompanied by a necessary cultural shift. This is most evident in the expansion of evidence-based medicine and the ethos of clinical governance, which have encouraged cultural and process change and the adoption of accepted good practice in clinical settings. With increased attention paid

[224] Initially published around mental health services, diabetes, older people and coronary heart disease, with others to follow later on, for instance, children, young people and maternity services.

to clinical effectiveness and governance systems, there has been increased pressure to show that health care delivered to patients is as far as possible based on robust evidence, leading to effective and good quality care (Ferlie, Barton, & Highton 1998). It also necessitated the existence of mechanisms to ensure the effective dissemination of research findings and their incorporation into everyday clinical practice (though this need not be within the remit of researchers).

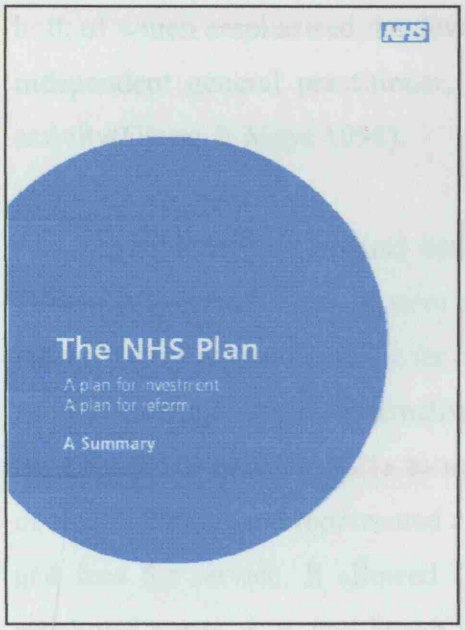

Plate A5: The NHS Plan

The publication of the NHS Plan in 2000 (Department of Health 2000c) outlined a long-term strategic plan comprising desirable developments to improve the operation of the NHS (Hunter 2001), including investment in NHS facilities and staff[225]; and reforms aimed at improving patient care[226].

These proposals were accompanied by a substantial increase in funding and should be interpreted within the wider context of the quality improvement agenda, increased decentralisation and moves to expand patient choice (NHS Executive 1999). They have led to structural changes and a reshaping of the ways in which primary and community care and social services are organised and delivered (Department of Health 2000c; 2001b). This included the introduction of Primary Care Groups and Trusts (PCG/Ts)[227] and Strategic Health Authorities (StHAs)[228], as well as the move from eight NHS Executive Regional Offices to four Directorates of Health and Social Care[229].

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[225] Such as the modernisation of over 3000 general practice premises and the availability of an additional 1000 medical school places.

[226] Such as the introduction of patient advocate services.

[227] Organisations based on local groups of general practitioners and bringing together primary and community health services.

[228] Covering a number of Primary Care Trusts and acting as over-arching performance management organisations.

[229] Directorates of Health and Social Care aimed to provide a key link between central Department of Health and Strategic Health Authorities and Local Authorities, thereby supporting Ministers, as well as taking responsibility for overseeing the development of the NHS and Social Care.

These changes have had implications for primary care, and for research, through the shifting of responsibilities and accountabilities, with the government's intention being to put primary care professionals:

> '...in the driving seat in shaping local health services' (Secretary of State for Health, 1997)

They built on proposals from two primary care White Papers published in 1996 (Secretary of State for Health 1996;Secretary of State for Health for England 1996), both of which emphasised the development of primary care organisations to replace the independent general practitioner, and primary care as the main locus for healthcare activity(Dixon & Mays 1998).

Just as previous governments had explored new models of primary care delivery, so Labour introduced a new system of Personal Medical Services (PMS) (Department of Health 1997) with potentially far reaching implications for the future of contract based general practice. As an alternative to the national General Medical Services (GMS) contract, PMS enabled PCTs to negotiate services directly with practices (Department of Health 2004a) and represented a radical departure from the old model of primary care and fees for service. It allowed GPs to become salaried employees rather than self-employed contractors, and health professionals other than GPs, notably practice nurses and nurse practitioners, and NHS trusts, could be contracted to lead the provision of primary health care services (Riley et al. 2003).

This agenda also facilitated exploration of flexible and integrated working, not only within primary care teams, but also across the primary and secondary care interface. Whereas the purchaser-provider split separated healthcare sectors, new arrangements under the 1997 *Primary Care Act* provided opportunities for more integration by allowing NHS Trusts to employ primary care staff directly (including general practitioners via PMS arrangements) and merging budgets for general medical services and hospital and community health services (Dixon & Mays 1998). Arguably such arrangements, whatever their overall aim, have the potential to develop more stable partnerships between providers in different settings[230].

[230] For instance, through employment of specialist nurses to help manage chronic disease within the community.

These changes also facilitated the development of managed clinical networks: linked groups of health professionals and organisations from primary, secondary, and tertiary care (Baker & Lorimer 2000). Such networks cover a specific disease, specialty or function and encourage co-ordinated and integrated care that cuts across existing organisational and/or professional boundaries. This built on the successful model of cancer networks, which developed to assist in the provision of integrated and co-ordinated care within cancer services.

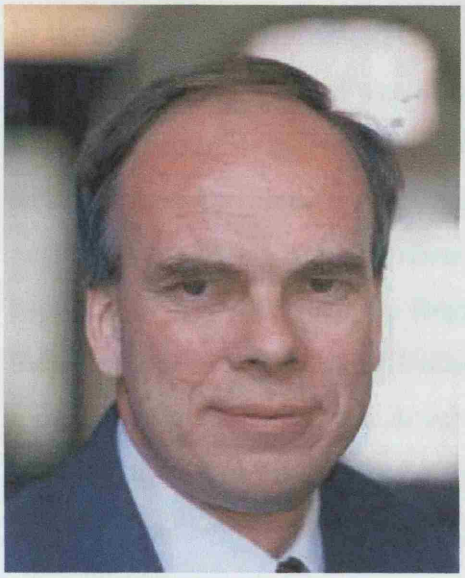

Plate A6: David Mant, Chair of the National Working Group on Primary Care R&D

The combination of a cultural shift and changes in the wider health care system led to primary care research becoming a more distinct area and to a number of targeted research-related policy initiatives. The Medical Research Council's *Topic Review on Primary Health Care* (1997) and the report of the *National Working Group on R&D in Primary Care* (also known as the *Mant Report*) (Mant 1997) both emphasised the need to build research capacity and to increase the amount of high quality research within primary care[231]. Two years later, the *Clarke Review* built on this further (Department of Health 1999b) with a specific review of primary care as an NHS priority area[232]. *Research and Development for a*

[231] A number of strategic objectives were outlined as to how this might be achieved and these included: the active support of an evaluative culture; the development and maintenance of an academic workforce; multidisciplinary and multi-professional research training opportunities; the recruitment, development and retention of R&D leaders in primary care; the involvement of non-clinical disciplines; and the achievement of an evidence-based culture in primary care.

[232] Key areas highlighted included the need to ensure a clearer focus on NHS needs and priorities within R&D; improve quality assurance systems for research programmes; encourage the systematic involvement of wider health communities and consumers; develop research capacity; organise the R&D in terms of research units, programmes and projects; and provide R&D funding to total health communities rather than single health service providers.

First Class Service (Department of Health 2000b) then set out a number of changes aimed at harmonising NHS R&D with the Government's modernisation agenda[233]. The impact envisaged included: aligning the management and funding of R&D with the principles of the new NHS; targeting NHS money on research priorities and needs, and on providing the NHS base for high quality science; setting a strategic direction for health services R&D for the benefit of the NHS; promoting R&D partnerships and networks across the NHS and between the NHS, researchers and consumers, to meet the needs of health and health care; ensuring consistent governance of R&D in the NHS; and strengthening performance management.

In terms of research infrastructure and activity, along with the continued development of the MRC GPRF, there was also a substantial growth in the number of primary care research support organisations, including primary care research networks (PCRNs) and Research and Development Support Units (RDSUs). These organisations developed in response to the need to increase capacity for primary care R&D and many were supported by NHS Executive Regional Offices[234]. As well as providing local support they formed an overarching Federation to ensure national coordination and strategic input to policy (Pickering & Smith 1999). These support organisations helped to foster capacity and capabilities within primary care research, particularly in relation to primary care nursing.

Other local initiatives also developed at this time, such as the London Implementation Zone General Practitioner Incentives Programme. Although primarily focused on education, the scheme was also concerned with ensuring integration with clinical and research skills and included a strand dedicated to facilitating career development in education and research (Pringle et al. 2000). In relation to research, funds were used to secure academic sessions for established general practitioners (helping to increase the research base locally), to fund joint academic service posts and provide training and support for research.

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[233] The report proposed that from 2001/2 onwards, two new NHS R&D funding streams would be initiated: 'Support for Science' designed to meet NHS costs of supporting R&D, and 'Priorities and Needs' funding, designed to fund R&D to underpin NHS modernisation and quality improvement.

[234] And later by the four Directorates of Health and Social Care, before coming under the auspices of the National Coordinating Centre for Research Capacity Development.

Although relatively young (compared to that of general practice or other medical disciplines), research related to primary care nursing also developed considerably in this period, underpinning disciplines and the resulting focal points of work (Ross, Vernon, & Smith 2002). Although the area has struggled somewhat for recognition and credibility, the period saw a growth in established Chairs in community nursing[235] and this has helped to build research capacity and capability within the area, bringing together the previously fragmented nature of community nursing research and enabling the development of emergent programmes and research training in the field (Ross 1999).

The *Mant Report* highlighted the problems experienced in nursing research; with a very small proportion involved in research in primary care and research careers difficult to pursue (Mant 1997). But overall nursing research was developing, influenced by the creation of new nursing roles and responsibilities, as well as awards open to both medical and non-medical researchers. Much of the research in this area was influenced by the wider philosophy of nursing practice such as qualitative methods with a focus on patient involvement, the use of phenomenological approaches to primary care problems and reflexive practice.

[235] The first Chair in community nursing having been funded by the Queen's Nursing Institute (Manchester University) in the 1980's.

Plate A7: Yvonne Carter, Chairman of the NHS R&D Primary Care Awards Panel (1999-2004) and RCGP Chairman of Research (1996-2000)

The work undertaken by the sub-group on nursing within the *Clarke Review* (1999) provided evidence of considerable research activity in primary care nursing across the UK and challenged assertions made earlier within the *Mant Report* that nursing research was largely descriptive (Mant 1997). A mapping exercise undertaken in 1999 indicated a wide range of topics and research methods (including 49 projects, out of the 243 identified, utilising randomised controlled trials or quasi-experimental designs) (Ross, Vernon, & Smith 2002). Hence, whilst nursing and nursing-related research was growing in this period, mainstream general practice-focussed research tended to overlook it. Indeed, it was not until 2002 that a research awards stream was created by the Department of Health dedicated to nursing and the allied health professions (several years after the *Mant Report* was published and an awards scheme for primary care research was established).

A2.6 National programmes and governance (2000-2005)

The structure of the NHS R&D changed considerably in this period with a move towards centrally co-ordinated programmes and away from regionally and locally devolved agendas. The modernisation programme instigated by the Labour government led to the dissolution of the four Directorates of Health and Social Care, along with their regional research and development directorates. Funding began to be co-ordinated centrally as the national NHS R&D programme began to develop and the focus shifted to national programmes responsible for investigating a range of healthcare matters and supporting the appliance of research-based knowledge, based around identified NHS priority areas.

The new structure for NHS R&D was recast from the previously large number of time-limited programmes into three national programmes: Health Technology Assessment (HTA)[236], Service Delivery and Organisation (SDO)[237]; and New and Emerging Applications of Technology (NEAT)[238]. In addition the Policy Research Programme developed to provide a knowledge base for policy development and implementation[239]. Sitting alongside these are now a number of cross-cutting programmes with National Coordinating Centres running programmes for Research and Development Methodology and Research Capacity Development. The Department of Health also funds a national advisory body promoting and supporting public involvement in research: INVOLVE (formerly NHS Consumers in Research).

These changes in the structure and funding of NHS R&D also resulted in a loss of responsive funding, previously available to researchers who were able to submit limited bids for small grants to support preliminary or pilot work in particular[240]. It has also led to changes in the processes associated with bidding for and receiving grants related to NHS R&D programmes, which have become nationally co-ordinated and increasingly technical.

The introduction of new funding systems was slowed a little by the development and dissemination of a framework for research governance in the NHS (Department of Health 2001a). This followed an increase in the scale of research and the extent of national funds to support it, as well as a series of high profile events relating to the conduct of research in healthcare settings. This included a series of inquiries focusing on the retention of organs for medical education and research purposes (Kennedy 2001; Redfern, Keeling, & Powell 2000), which raised public concerns and led to changes in the way that surgical or autopsy tissue is stored. However, this is despite the evidence that, for instance, many of the actions taken were within legal and ethical codes of the

[236] Aiming to provide all those who make decisions in the NHS with high-quality information on the costs, effectiveness and broader impact of health care treatments and tests.
[237] Aiming to consolidate and develop the evidence-base on the organisation, management and delivery of health care services.
[238] Aiming to promote and support the use of new or emerging technologies to develop health care products and interventions to enhance the quality, efficiency and effectiveness of health and social care.
[239] The research portfolio covers healthy living and social well being, disease prevention, the role of the environment in health, social care for adults and children, the organisation of the NHS, and strategies for treating particular diseases or conditions.
[240] Though a recent document has confirmed that this mode of funding is now set to return (DH, 2006).

time (Bennett 2001). But the high profile and controversial nature of the debate resulted in changes, including the publication of a new framework for undertaking and managing research in healthcare.

The first Research Governance Framework for Health and Social Care was published in 2001[241], drawing together existing regulations and guidance in order to provide a framework for quality assurance that can then be monitored. The Framework aspires to enhance ethical and scientific quality, promote good practice, reduce adverse incidents and ensure lessons are learned. It has therefore had wide implications for the way research is both managed and conducted (Kerrison, McNally, & Pollock 2003; McNally, Kerrison, & Pollock 2003; Shaw, Boynton, & Greenhalgh 2005). The Framework included patient and public involvement as a specific requirement of research. This reflected wider political developments relating to patient choice, but also the expansion of the work of INVOLVE.

The introduction and implementation of research governance raised some concerns about the ability of research active individuals and organisations to cope with new bureaucratic structures and systems, with implications for the amount of research undertaken and the timescales in which projects may be effectively achieved. However, this may be a short-term phenomenon and, once systems have 'settled in', the principles

Plate A8: Offices of the Sheffield Health and Social Care Research Consortium responsible for coordinating local governance arrangements

[241] A subsequent revised edition was then issued in May 2005.

behind high quality management and governance have the potential to facilitate development of a research culture in primary care (Bryar 2002).

Although not originally written into policy, the government eventually placed an obligation on all PCGs to become Trusts by April 2002. In England PCTs became increasingly important, controlling 75% of the health service budget from April 2004 (Department of Health 2001b), the long-term aim being for PCTs to hold a sufficiently large portion of the NHS budget that might allow them to achieve their responsibilities without the same level of central budgetary control. Variations on the organisational theme have also been introduced with teaching PCTs (tPCTs) formed to stimulate learning within primary care, especially in under-doctored PCTs (Department of Health 2001c); and a network of over 60 PCT Research Management and Governance (RM&G) sites developing to ensure shared arrangements for NHS management and approval of research activity (Department of Health 2002a; Shaw et al. 2004) (see Figure A1).

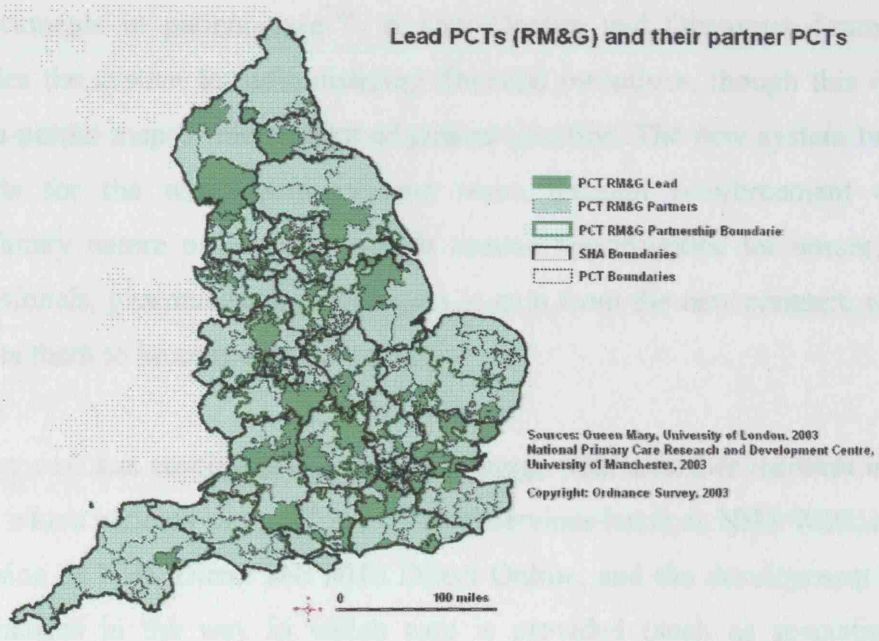

Figure A1: Shared Arrangements for Research Management and Governance across Primary Care Trusts in England (in April 2005)

Around the same time as the high profile events around research misconduct (see above), Dr Harold Shipman was convicted of the murder of 15 of his patients while he was a General Practitioner and sentenced to life imprisonment. This led to an independent inquiry to establish what changes to systems were to be made in order to safeguard patients in the future. The inquiry raised particular issues around systems for monitoring the performance of general practitioners. Although the General Medical Council, which regulates UK doctors, first proposed systems for revalidation of doctors as far back as 1998, the outcomes of the inquiry led the GMC to alter its plans and for a high level review to be undertaken by the Chief Medical Officer. Although the exact approach to revalidation is, as yet, unclear, the introduction of new measures to protect both patients and doctors and ensure greater transparency and accountability now seems inevitable.

In the meantime, a new GP contract has been agreed[242] allowing general practitioners to choose whether to provide just essential care for patients who are acutely or chronically sick, or to offer a wider range of services (such as contraception, vaccination or minor surgery). The contract works on the basis of financial incentives and encourages improvements in patient care[243]. A new Quality and Outcomes Framework (QOF) provides the system for administering financial incentives, though this is only able to offer a partial map of the content of general practice. The new system brings potential benefits for the wider primary care team, through reinforcement of the multi-disciplinary nature of primary care. It creates opportunities for nurses, allied health professionals, pharmacists and managers to gain from the new contract, much of which requires them to be central to its delivery.

Primary care has continued to grow and change with a further increase in the range of places where patients can get 'first contact' services (such as NHS Walk-in Centres, the expansion of NHS Direct and NHS Direct Online, and the development of pharmacy) and changes in the way in which care is provided (such as specialist care in the community being offered by nurses and other health professionals and an expansion of nurse and pharmacist prescribing). Patient choice has also been extended with patients

[242] For those contracted to provide General Medical Services.
[243] With those providing a wider range of services and whose clinical work meets high standards being rewarded financially.

with specific conditions offered a choice of locations for their outpatient appointments, aided by the widening of the range of providers[244]. However it also suggests a substantial shift away from general practice as a field of biographical medicine and more towards task-orientated biomedical work (Charles-Jones, Latimer & May, 2003).

The expansion of services in primary care has particularly focused around the care of the 17.5 million people with chronic illnesses (Department of Health 2004a), such as heart disease, mental illness, asthma and diabetes. Innovative models of care aimed at more effective chronic disease management and improved patient outcomes have developed[245]. Various models exist for assisting with the management of chronic disease, including the Evercare programme, developed in the USA to improve the quality of life for vulnerable older people and since transferred to the UK and piloted in PCTs. Primary care teams remain well-positioned to sustain support for people with long term conditions with a network of community providers including nurses, general practitioners, pharmacists and therapists who are able to contribute to long-term, collaborative care plans (Wilson, Buck, & Ham 2005). This is reinforced by the inclusion of a reward system for the management of ten chronic diseases within the new Quality and Outcomes Framework (see above).

This model of collaborative disease management has also been influenced by the development of cancer networks (see above) and provides opportunities for developing research. The National Cancer Research Network was established by the Department of Health in April 2001 to improve the infrastructure within the NHS for clinical research in cancer and to ensure that research is better integrated with cancer care. Its aim is to improve the speed, quality and integration of research, ultimately resulting in improved patient care. Following the perceived success of this cancer network model, along with high profile reports on the future of academic medical careers (Academy of Medical

[244] For instance, from August 2004 all patients waiting longer than six months for an operation are offered a choice of an alternative place of treatment and, from December 2005 patients needing elective treatment are offered a choice of four or five hospitals once ther GP has decided that a referral is required (these could be NHS trusts, foundation trusts, treatment centres, private hospitals or practitioners with a special interest operating within primary care).

[245] Referred to, often interchangeably, as managed care, integrated care, disease management, co-ordinated care and case management.

Sciences 2003)[246] and biosciences (Department of Trade and Industry 2003a)[247], the Department of Health established the Research for Patient Benefit Working Group to bring forward recommendations at ministerial level to implement the recommendations of the two reports. At the same time the Government consulted on the future investment in science and innovation[248] and in their budget speeches the Chancellor of the Exchequer and the Secretary of State for Health announced substantial increases to NHS R&D funding and called for the creation of a UK Clinical Research Collaboration (UKCRC). The final report of the Working Group therefore proposed a radical reorganisation of the research infrastructure along these lines (Department of Health 2004b).

The UKCRC aimed to develop as a partnership between government, the voluntary sector, patients and industry and existed to oversee clinical research[249] in the UK. The new NHS research infrastructure is envisaged as a series of Clinical Research Networks (i.e. a set of managed research networks), with initial development covering mental health, medicines for children, Alzheimers disease, stroke and diabetes (Department of Health 2004b). Building on the model of cancer networks, this structure is primarily disease-oriented and hence driven by values and concepts more closely associated with the work of secondary care than that of primary care. Primary care was not identified within the report as a specific area for network development with discussion restricted to the potential use of incentives within the new GP contract as a means of encouraging collaboration and recruitment of patients into clinical research activities. More recently, the Department of Health announced the development of up to eight Local Research Networks forming a new Primary Care Research Network for England (PCRN-E)[250]. The focus of the networks is primarily on providing NHS infrastructure to deliver high quality clinical trials. Following consultation a new NHS Research Strategy has also been published (Department of Health 2005a;Department of Health 2006)

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[246] The report specifically identified two major areas with a serious lack of activity and capacity in the UK that require urgent attention: experimental medicine and large-scale clinical trials of all new forms of healthcare intervention.

[247] The report envisions that by 2015, the UK will have secured its position as a global leader in bioscience by developing a diverse, self-sustaining bioscience sector.

[248] The Treasury document *'Science and Innovation: working towards a 10 year investment framework'* received a large response from across a range of public and private sector organisations.

[249] The definition of clinical research used within the report encompasses: "...clinical trials, experimental medicine, translational research, epidemiological studies and public health." (DH, 2004b: 1).

[250] At the time of writing it is envisaged that these new organisational structures will formally come into being on 1st October 2006.

The Research for Patient Benefit Working Party clearly recognised that the emphasis on explicit standards, protocols and quantification of the 1990's has continued unabated and they concluded that the regulatory environment governing research has become complex and burdensome. This led to establishment of a specific group to review and address over-regulation and bureaucracy in the context of clinical research. In addition the NHS R&D Forum has been formed to provide help and advice to those engaged in managing and organising research in NHS health and social care organisations, and has a number of specialist working groups that actively feed into policy development, including one dedicated to primary care.

Academic departments of general practice and primary care and other university departments continue to be engaged in health services and/or social science research. In the 2001 RAE, 27 departmental groupings were returned within the Community Clinical Sciences Unit of Assessment and, of these, 24 achieved a score of 4 or more (Wilson et al. 2005). Although there is some scepticism about the scoring system for research assessment, this suggests at least a national level of research excellence in this setting. Working in partnership with networks of teaching and research active practices, a multi-professional approach is illustrated by the variety of disciplines currently working within academic departments of primary care (Society of Academic Primary Care 2002). This may include doctors, nurses, managers, social scientists, anthropologists, statisticians, psychologists and others, with the proportion of non-medical staff based in departments of general practice and primary care rising from 10% to 32% between 1986 and 2001 (Society of Academic Primary Care 2002). This multi-disciplinarity in primary care research is represented through the Society of Academic Primary Care (SAPC)(formerly the Association of University Departments of General Practice), directed via the Heads of Department of Primary Care Group, which acts as a national strategic, coordinating body and has become increasingly active in feeding into Department of Health and NHS policy. It is estimated that 35% of members of the Society of Academic Primary Care have non-clinical backgrounds (Wilson S et al. 2005).

Other groups active in influencing policy in this area include the Royal College of General Practitioners Research Group. With representation across many of the bodies

outlined above, as well as the Department of Health and National Coordinating Centre for Research Capacity Development, the Research Group acts as a support network to researchers and research organisations, as well as a UK-wide strategic and lobbying body in relation to primary care research (Royal College of General Practitioners 1999).

A2.7 Looking to the Future

Against this background, there appear to be both opportunities and challenges for primary care research. Although the health research economy has varied in its strategic aims and approach over the years, it has largely maintained six main components (Harrison & New 2002). This has included two private sector components: the for-profit sector (e.g. pharmaceutical industry) and the not-for profit private sector (e.g. charities and non-governmental organisations), and four main public players: the Department of Health, the NHS, Medical Research Council (and to a smaller extent other research councils) and the university sector funded via the Higher Education Funding Council for England (and its counterparts across the UK). All of these sectors support research *in* and *on* primary care to varying degrees.

The focus in the health research economy has now shifted clearly onto collaboration. Partnerships between the public and private sectors (and between a range of individuals and organisations within them) are now actively encouraged or even made a requirement for funding support[251]. This is reflected in the development of collaborative programmes of research that address NHS priority areas (such as cancer or mental health) and which are required in order to build the evidence base on which high quality clinical care may be provided. However, although primary care has been identified as a priority in the past, there is some concern that new arrangements focusing on clinical networks no longer recognise it as a defined area, focusing instead on the role of primary care in providing a pool of potential participants for nationally co-ordinated clinical trials.

Primary care has gone through a period of rapid change, with other initiatives (such as the new GP contract) still settling in. Although primary care research might be best served by an approach that is multi-disciplinary and where teams operate in a fluid

[251] This is apparent in the early development of interdisciplinary clinical research networks.

manner, this requires inter- and intra-organisational networking and facilitation to prosper. There have undoubtedly been developments in this area but establishing and sustaining strong relationships requires long-term investment of both time and resources, which may be counter to the more rapidly changing healthcare environment. In addition, a range of primary care professionals, practitioners and non-clinicians are involved in primary care research that is based across a whole range of organisations and settings. As research is increasingly taking place via new networks that specifically aim to cut across organisational and professional boundaries, this raises questions over contested power relations and accountabilities within research (Shaw et al 2004; 2005).

Primary care has made considerable headway in building a research base relevant to the setting and embracing a broad range of methods and disciplines. But new arrangements for NHS R&D have raised concerns over the future: arrangements following the report of the Research for Patient Benefit Working Party tend to focus on the use of large-scale clinical trials in answering the question 'what works' and reflecting wider hierarchies of knowledge and methods (Owen & Cooke 2004). Primary care is not only relatively new to research (compared to other areas of medical research), but also makes use of a wide range of methods including more interpretive approaches able to capture 'how' something works. If the traditional model of research focusing on large-scale clinical trials dominates the agenda then some areas of primary care research may find it difficult to compete for funding and support in the new world of NHS R&D. Indeed, although Culyer helped to shift the balance of research infrastructure and funding away from the traditional domination of secondary care, primary care remains susceptible to power brokering with a lack of financial and political clout in the research world[252], further compounded by the historical view of general practitioners and their teams regarding research as a minority option. This is not helped by the fact that research is not currently rewarded via the existing GP contract However, this may not be problematic as it seems likely that the current focus on multi-centre collaborative research is likely to lead to less practice-led research.

[252] For instance, although PCTs hold a majority of the NHS budget, this may not invoke greater political or financial manoeuvring particularly as this increased budget does not necessarily equate to substantial research activity.

This is not to suggest that new arrangements do not offer opportunities. A new National School of Primary Care and a Primary Care Research Network for England, both linked into new clinical research infrastructures may well offer a means of overcoming professional and organisational silos and for moving beyond traditional delineations of healthcare sectors and research domains.

A2.8 Summary

This appendix has introduced readers to the broad area of primary care and related research; describing key institutions and working arrangements. By drawing together organisational changes and policy development, it has presented an overview of general practice and primary care, as well as research in this context, pointing to particular events and policies that have helped to shape the area. Whilst considering the broad historical context of primary care research, it has focused particularly on the period following the introduction of the first NHS R&D Strategy in 1991 and concluded by considering future opportunities and challenges in light of recent policy changes within the health research economy.

Appendix 3: Chronology of primary care research to December 2005

Historical, social and political change	General and political events concerning general practice and primary care	General events concerning health-related research and development	Events specific to general practice and primary care research
	1858 Medical Act passed and general practice entered the medical family		
1916 Department of Science and Industrial Research established (abolished 1964)		**1913** Creation of Medical Research Council representing the first commitment of public funds to health research	
1918 Haldane Committee reports on the machinery of government			
1919 Creation of the University Grants Committee (now HEFC)			**1939** *Epidemiology in Country Practice* by Will Pickles
Nov 1946 National Health Service Act		**1946** NHS Act essentially gave Minister of Health powers to conduct / fund research	
5 July 1948 Appointment Day, marking the beginning of the NHS and related social service reforms	**1950** The Collings Report, published in the Lancet		
	1952 College of General Practitioners founded with research clearly identified as a key part of the foundation	**1953** *Clinical Research in Relation to the National Health Service*. London, HMSO (White Paper)	
1956 Enquiry into the cost of the NHS (Guillebaud Report)			**1957** First independent University Department of General Practice established in Edinburgh

March 1957 Treaties of Rome establishing EEC

1957 *The Doctor, his Patient and the Illness* by Michael Balint

Feb 1958 first issue of the Journal of the College of General Practitioners (now known as British Journal of General Practice)

1959 Britain's first (and last) Minister for Science appointed (Lord Hailsham)

1958 Chief Medical Officer in the Ministry of Health is given a small research fund to use at his disposal

1958 Morbidity Statistics from General Practice (The First National Morbidity Study)

1962 A section concerned with research is created within the Dept of Health

1961 *The Catarrhal Child* by John Fry

1963 *Report of Enquiry into the Organisation of Civil Service* (The Trend Report). Cmnd 2171.

1963 *The Field of Work of the Family Doctor*. London, HMSO (Gillies Report)

1963 R Scott appointed in Edinburgh as Professor of General Practice, the first such post to be created

1964 Declaration of Helsinki, a landmark in medical ethics

c 1967 The beginning of an increase in the building of health centres and the development of multidisciplinary teams

1963 *Towards Earlier Diagnosis* by Keith Hodgkin

Dec 1967 College of General Practitioners receives it Royal Charter

1967 A departmental research committee is in place administering a budget of £750,000

1967 *Patients and their doctors* by Ann Cartwright

May 1970 Osmond Report laying the ground for wider discussions around the independence of Research Councils from government departments

Early 1970s On-going reorganisation of the NHS

1971 *Effectiveness and efficiency* by Archie Cochrane

1971 Julian Tudor Hart, *The Inverse care Law*, Lancet i: 405-12

1971 *Framework for Government Research and Development* (Green Paper) including Dainton and Rothschild reports and seeking to align the work of Government research establishments with the needs of departments

1971 *The Organisation of Group Practice*. London, HMSO

1972 *The Future General Practitioner: Learning and Teaching* published by the RCGP

1972 *Framework for Government Research and Development* (White Paper) published by the Cabinet Office and leading to customer contractor split in research commissioning

1972 First University Chair of General Practice in England appointed at Manchester

Jan 1973 UK, Denmark and Ireland become full members of the EEC

1972 DHSS Chief Scientist appointed to set up an organisation responsible for commissioning research

1973 MRC General Practice Research Framework established

1 April 1974 establishment of Community Health Councils

1974 Creation of the Association of University Teachers of General Practice (now Society of Academic Primary Care)

1973 *Common Diseases: Their Nature, Incidence and Care* by John Fry

1975 *Medical Nemesis: The Expropriation of Health* by Ivan Illich

1975 Establishment of the Joint Committee on Postgraduate Training for General Practice. Vocation training for general practice mandatory

1977 NHS Act ensuring the Secretary of State for Health has a duty to make clinical teaching and research facilities available to universities with a medical or dental school

1978 The Alma Alta Declaration *'Health for All by the Year 2000'* promulgated by the WHO

1978 Nuffield Provincial Hospitals Trust working party highlights the lack of a definable research policy within the DHSS

3 May 1979 General election: Conservative majority 43. Prime Minister, Margaret Thatcher

August 1980 *Report of a Research Working Group on Inequalities in Health* (The Black Report)

1981 *The Measurement of Scientific and Technical Activities* (The Frascati Manual), OECD

9 June 1983 General election: Conservative majority 144. Prime Minister, Margaret Thatcher

Oct 1983 NHS Management Inquiry (The Griffiths Report) leading to establishment of NHS Management Board (later NHS Exec)

1983 Creation of the Audit Commission and transformation of the Exchequer and Audit Department into the National Audit Office

1985 Jarratt Report published on efficiency studies in universities

Jan 1986 Save Our Science Society established by scientists to defend basic research

11 June 1987 General election: Conservative majority 102. Prime Minister, Margaret Thatcher

c late 1980s Rise in performance management & culture of accountability; relocation of NHS Management Executive to Quarry House in Leeds

Jan 1988 Thatcher announces wide-ranging review of the NHS

July 1988 Split of Departments of Health and Social Security. Secretary of State for Health, Kenneth Clarke

1983 *Rethinking General Practice* by Margot Jeffreys and H. Sachs

1987 *Promoting Better Health: The Government's Programme for Improving Primary Health Care*, Cmnd 249 (Primary Care White Paper)

Late 1980's the beginning of an explicit focus on a primary care-led NHS and a growth in multidisciplinary primary care teams

1988 *A New Kind of Doctor* by Julian Tudor Hart

1984 A further Nuffield report re-emphasises the need for a well-integrated research policy in the realm of health

1985 Automatic right of British Technology Group to patent publicly funded research is removed

1988 Education Reform Act marking the end of secure academic tenure and the beginning of the Research Assessment Exercise

1988 House of Lords Select Committee on Science and Technology Report on *Priorities in Medical Research*

1984 Journal, Family Practice launched

1988 *Report of the Working Group on Research in Health Care in the Community* (The Howie Report)

1989 University Grants Committee replaced by Universities Funding Council (now HEFC)

28 Nov 1990 Replacement of Thatcher by John Major as Prime Minister. Secretary of State for Health, William Waldegrave

April 1991 Implementation of NHS and Community Care Act. Commencement of purchaser / provider system.

Early 1990's Evidence-based medicine developing as a social movement

April 1992 Introduction of the *Patients Charter*

9 April 1992 General election. Conservative majority 21. Prime Minister John Major; Secretary of State for Health, Virginia Bottomley

July 1992 *The Health of the Nation: A Strategy for Health in England*, Cmnd 1986

Jan 1989 *Working for Patients* Cmnd 555

1990 New terms and conditions under the revised General Practitioner Contract come into force

1991 Establishment of fundholding

1992 *Primary Care: Concept, Evaluation and Policy* by Barbara Starfield

1989 *Government response to the House of Lords Select Committee Report on Priorities in medical research*. Cmnd 902

May 1990 Creation of NHS R&D Director post

Jan 1991 Research and Development Directorate created within the Department of Health and first DRD takes up post

Jan 1991 Appointment of first DH Director of Research and Development (Michael Peckham), including membership of NHS Management Executive

Sept 1991 *Research for Health: A Research and Development Strategy for the NHS* published by the DH

Oct 1991 First meeting of the DH Central Research & Development Committee

1992 Regional R&D Directors appointed by DH

Oct 1992 Establishment of the UK Cochrane Centre in Oxford

1989 *Introduction to Family Medicine* by Ian McWhinney

1992 *Forty Years On. The story of the first forty years of The Royal College of General Practitioners* published by the RCGP

1992 Office of Science and Technology created within the Cabinet Office where control of science budget transferred

1993 Chancellor of the Duchy of Lancaster. *Realising Our Potential: A Strategy for Science Engineering and Technology* Cmnd 2250

1993 NHS Health Technology Assessment Programme launched with establishment of a Standing Group on Health Technology

Nov 1993 Implementation of Maastricht Treaty establishing the European Union

1994 Creation of the Biotechnology and Biological Sciences Research Council (following restructuring of SERC)

1994 Foresight initiative launched

1995 Office of Science and Technology transferred to the DTI

1995 New NHS Regional Offices established

1995 Centre for Evidence Based Medicine opened in the Nuffield Department of Medicine in Oxford

1993 NHS-industry research advisory group established

May 1993 *Report of the Taskforce on the Strategy for Research in Nursing, Midwifery and Health Visiting*, DH

June 1993 Second edition of *Research for Health* published

Nov 1993 Minister of State for Health announced task force on research and development chaired by Anthony Culyer

1994 Establishment of the NHS Centre for Reviews and Dissemination at the University of York

1994 *Research and Development Task Force. Supporting research and development in the NHS* (chaired by Professor Anthony Culyer).

1994 RCGP Research Practices established

1995 National Forum created to consider broad strategic R&D issues across organisations

1995 National Primary Care Research and Development Centre established at University of Manchester

May 1995 House of Lords Select Committee on Science and Technology Report on *Medical research and the NHS reforms.* HL Paper 12

July 1995 Stephen Dorrell replaces Virginia Bottomley as Secretary of State for Health

c mid 1990's Growth of nursing and applied research

c mid 1990s National R&D programme dedicated to the primary/secondary care interface

Sept 1995 *Government response to House of Lords Select Committee Report on Medical research and the NHS reforms*. Cmnd 2984

April 1996 Formation of Health Authorities (merging District Health Authorities and Family Health Service Authorities)

Oct 1996 Secretary of State for Health. *Primary Care: The Future - Choice and Opportunity*

Dec 1995 Michael Peckham retires and new DH R&D Director appointed (John Swales)

Nov 1996 Secretary of State for Health. *The National Health Service: A Service with Ambitions*

Dec 1996 Secretary of State for Health. *Primary Care: Delivering the Future*

April 1996 Standing Advisory Group on Consumer Involvement in the NHS R&D Programme established (now known as INVOLVE)

1996 *The Nature of General Practice. Report from General Practice 27.* RCGP London

1 May 1997 General election: Labour majority, 179. Prime Minister, Anthony Blair; Secretary of State for Health, Frank Dobson

March 1997 Primary Care Act

Nov 1997 *Clinical Academic Careers* (The Richards Report)

1997 *National Working Group on R&D in Primary Care: final report*. (The Mant Report)

Dec 1997 Secretary of State for Health. *The New NHS. Modern and Dependable*, Cmnd 3807.

1997 marks the beginning of new clinical governance proposals focusing on increased accountability and continuous quality improvement

Dec 1997 House of Lords Select Committee on Science and Technology Third Report. *Clinical Academic Careers*.

1997 *MRC Topic Review Primary Care*

1997 Dearing report published on the future of higher education

1997 Increased local flexibility with the introduction of Personal Medical Services contract

July 1998 *A first class service: quality in the new NHS.* Department of Health

April 1998 Launch of National Service Frameworks

Apr 1998 *Developing Human Resources for Health-Related R&D: Next Steps.* Report of the R&D Workforce Capacity Dev. Group (Pearson Report).

May 1998 UK Federation of Primary Care Research Networks established (now UK Federation of Primary Care Research Organisations)

Oct 1998 Inquiry begins into the management of care of children receiving complex heart surgery at Bristol Royal Infirmary

April 1999 Secretary of State launches National Institute for Clinical Excellence (now National Institute for Health and Clinical Excellence)

July 1999 Secretary of State for Health. *Saving Lives Our Healthier Nation*

October 1999 Alan Milburn replaces Frank Dobson as Secretary of State for Health

Feb 2000 Shipman Inquiry announced to establish changes needed to safeguard patients.

2000 *The NHS Plan. A plan for investment. A plan for reform* Department of Health

2000 *An Organisation with a Memory.* Report of an expert group learning from adverse events in the NHS Chaired by the Chief Medical Officer.

April 1999 The first Primary Care Groups are established

c 2000 Development of structured chronic disease management models

1999 NHS R&D Strategic Review (Chaired by Sir Michael Clarke)

1999 Launch of national NHS R&D programme on New and Emerging Applications of Technology

2000 Cross-departmental review of science and research informing future spending plans

March 2000 Launch of the NHS Service Development and Organisation (SDO) R&D Programme

March 2000 *The Tenure-Track Clinician Scientist: A New Career Pathway to Promote Recruitment into Clinical Academic Medicine* (The Saville Report) Academy of Medical Sciences.

March 2000 *Research and Development for a First Class Service: R&D funding in the new NHS* in which DH announces changes in NHS research funding policy

1999 Clarke Review Sub Group on Primary Care

July 2000 *Excellence and opportunity: a science and innovation policy for the 21st century*. DTI, Cmnd 4814

April 2000 The first Primary Care Trusts are established

Aug 2000 *Towards a Strategy for Nursing Research and Development. Proposals for Action*. DH

Aug 2000 *NHS R&D Funding. Consultation Paper: NHS Priorities and Needs R&D Funding*. Department of Health

2001 EU Clinical Trials Directive 2001/20/EC

2001 *Research and Development for a First Class Service: next steps*. DH

Feb 2001 First edition of *Research Governance Framework for Health and Social Care*. Department of Health

7 June 2001 General election: Labour majority, 166. Prime Minister, Anthony Blair. Secretary of State for Health, Alan Milburn

2001 *Shifting the Balance of Power: Securing Delivery*. Department of Health

Mar 2001 Establishment of Teaching PCTs announced

Sept 2001 Department of Health Science and Innovation Strategy published

2001 *Clinical Research Report*. Pharmaceutical Industry Competitiveness Taskforce Force.

Feb 2002 *Non-Clinical Scientists on Short Term Contracts in Medical Research: A report on career prospects and recommendations for change*. AMS

2002 Strategic Health Authorities to manage the local NHS on behalf of the Secretary of State

April 2002 *Securing Our Future Health: Taking a Long-Term View* (first Wanless Report) HM Treasury

2002 Launch of national scheme to accredit primary care research teams (Primary Care Research Team Assessment)

Apr 2002 Implementing the Clinician Scientist Scheme. A report from the Academy's Clinical Academic Training Committee. AMS

Sept 2002 *New century, new challenges*. A report from the Heads of Department of General Practice and Primary Care in the Medical Schools of the United Kingdom.

June 2002 Clinical academic medicine in jeopardy. Recommendations for change. AMS

Nov 2002 Minister of State for Health announces review of the role of Primary Care Trusts in relation to learning and research in the new NHS, following debate in the House of Lords

2003 NHS Health Technology Assessment R&D Programme launched

March 2003 Is primary care research a lost cause? (editorial) Lancet 361: 977

Apr 2003 Launch of DH National Coordinating Centre for Research Capacity Development

2003 John Reid appointed Secretary of State for Health

Oct 2003 *Strengthening Clinical Research*. A report from the Academy of Medical Sciences

Nov 2003 *Bioscience 2015. Improving national; health, Increasing national wealth*. A report to the Government by the Bioscience Innovation and Growth Team

Dec 2003 *Lambert Review of Business-University Collaboration*. HM Treasury

Dec 2003 *Innovation Report. Competing in the global economy: the innovation challenge*. DTI

Feb 2004 *Securing Good Health for the Whole Population* published by HM Treasury (second Wanless Report)

March 2004 Announcement of establishment of UK Clinical Research Collaborative in Budget speech

May 2004 The Government Response to "Biosciences 2015", the Report by the Bioscience Innovation and Growth Team

July 2004 *Science and Innovation Investment Framework 2004-2014*. HM

Sept 2004 Launch of Quality Outcomes Framework for general

May 2004 *Research for Patient Benefit Working Party - Final Report*

Sept 2004 Mant et al. *The state of primary care research*. Lancet 364:

Treasury (preceded by consultation document in Mar 2004)

practices

1004-06

2005 *The Future of Academic Medicine. Five scenarios to 2025.* Milbank Memorial Fund (coming out of the Campaign for the Future of Academic Medicine)

March 2005 *Joint Ministerial Review of the role of primary care trusts in relation to learning and research in the new NHS.* NHS Modernisation Agency.

2005 Early development of NHS patient choice agenda

Apr 2005 Development of indicative commissioning budgets, leading into national primary care practice based commissioning scheme

April 2005 Second edition of *Research Governance Framework for Health and Social Care*, Department of Health

5 May 2005: General election: Labour majority, 65. Prime Minister, Anthony Blair; Secretary of State for Health Patricia Hewitt

2005 *Better Metrics Project - Proposals for Measuring Research and Development.* Department of Health

Jan 2005 *Non-medical staff in academic departments of Primary Care.* Report of a working party set up by the Executive Committee of SAPC

Mar 2005 *The Influence of the Pharmaceutical Industry.* House of Commons Health Committee.

Mar 2005 *Medically- and dentally-qualified academic staff: Recommendations for training the researchers and educators of the future.* (Walport Report) Modernising Medical Careers and UKCRC

June 2005 *Report of the Ad Hoc Advisory Group on the Operation of NHS Research Ethics Committees* (Warner Report)

Aug 2005 *Best research for best health: A new National Health Research Strategy - the NHS contribution to health research in England: A consultation.* Dept of Health

Sept 2005 *Government Response to the Health Committee's Report on the Influence of the Pharmaceutical Industry*

Nov 05 Plans announced for a new Primary Care Research Network for England along with a call for bids for up to eight Local Research Networks

Appendix 4: Data extraction form for policy documents, annotated to illustrate how it was used

ID	PUB'N DATE	TITLE OF POLICY DOCUMENT
Assigned number for reference	Official date of publication	Official title, recorded on the document
1) Relevance **2) Importance**		To record perceived relevance and importance of the document in relation to the research question/s
3) Type		To record whether documents can be identified in particular ways (e.g. White Paper, guidance or implementation plan), either explicitly within the document itself or implicitly through my own classification. This follows the notion that policy is manifest in many different forms; for instance, at times referring to a piece of legislation and at other times to a set of practices captured within a debate or series of documents.
CONTEXT: WHY WAS THE DOCUMENT WRITTEN?		
4) Clarity of purpose: i) Are there any stated events / discussions / policy etc which have led to the document?		To highlight events that have contributed to the development of policy; to show how policy discourse/s has evolved; and to provide contextual information beyond the specific time / date of publication. This follows the poststructural notion of discourse as historically located.
ii) Have any resources been provided to facilitate production of the report?		To assess the level of support for policy development and/or the requirement for policy related documents to report on these elements of their development.
iii) What are the explicit / and implicit aims (or terms of reference) of the document?		To help in unravelling what the document was envisaged as doing (its purpose) and to uncover whether or not this was ambiguous.
iv) Does this policy explicitly supersede existing policies?		To establish if there is any clear statement reneging or overriding existing policy in favour of the policy-related document at hand, helping to reveal how and where policy discourse/s might change or shift in their context or meaning.

v) What is the intended audience?	To identify whom the document/s purports to speak to and, following from this, who is not spoken to. This raises questions about power relations and who may or may not gain from employment of discourses embodied within a document.	
vi) What is the time span for the policy?	To assess whether there are any restrictions of time relating to a particular policy or the document embodying policy; if there is a finite period of time in which a policy or document is relevant. This further facilitates identification of temporal aspects of discourse/s.	
vii) Does the document explicitly refer to any documents, which set out additional guidance and should they be read together?	To explore how policy-related documents relate to each other and, in turn, allow for exploration of how policy discourses are constituted as a coherent system of meanings.	
METHOD: HOW WAS THE DOCUMENT DEVELOPED?		
5) Process and scope i) What processes were pursued in creating the document, and was it a requirement that these processes were explicitly reported?	To explore the means by which policy – or elements of policy – has come into being and how this has been influenced by discursive activity. In addition to explore the requirement, or lack of it, for policy related documents to comment on their own development.	
ii) Are specific definitions included? Do these reject other existing definitions and whose views do these reflect?	To pick up on particular characterisations within policy and identify how these have developed and shifted over time. This in turn feeds into exploration of wider power relations in terms of exploring who might gain and lose from employment of associated discourses and who might want to dissolve or promote discourse/s embodied by such characterisations. In addition, to explore how discourses comment on the terms employed.	
	INDIVIDUAL	**GROUP**
6) Objectivity: i) Specific task/s or broad remit?	To draw attention to the role of policy actors or experts in the construction of policy over time by recording all actors indicated as directly involved within each of the policy documents studied (such as member/s of steering group or chair of panel) (this information is stored within a separate spreadsheet to aid readability and reference across documents); to explore any detail relating to the identification / selection of individuals or any explicit obligation that this information might (not) be reported by the document; to detail (where possible) who led the group responsible for developing the	
7) Entitlement: ii) What reasons are given for selection of these people?		
iii) What was the appointment process?		

iv) Who led / Chaired the group? And rational for this?	policy-related document and why; and to record any explicit or implicit tasks or concerns to be addressed by any individual/s or group/s involved.
CONTENT: WHAT DOES THE DOCUMENT INCLUDE?	
8) Accessibility and readability i) Number of chapters/sections/pages	To explore whether the document is easily approachable, readable and digestible by its intended audience. Alongside other sections (such as any plans for distribution and implementation), this might indicate willingness to structure documents in particular ways to facilitate (or stifle) understanding, interpretation or action (or vice versa); and to explore how policy documents might have changed in their structure over time and link with other sections to suggest why this might be.
ii) Supporting information provided	
iii) What other information is provided? E.g. annex, appendices	
9) Ownership i) Who 'signed off' the foreword?	To suggest the significance associated with a document beyond its type (see section 3 above) (for instance, a ministerial foreword might suggest a high profile initiative with political weight, as compared to no foreword at all); and to identify the locus of policy-related initiatives or decisions within particular organisations or government departments.
ii) Organisational affiliation of document and publisher	
10) Storylines i) Key storylines / policy emphases:	To identify the narratives included within each document, including those presented as the important or main features, those that appear as secondary and those that do not appear at all. This provides a space for initial mapping of the world that discourses represent. This is not a space for distinguishing discourses as such but, rather an aid to distinguishing discourses by facilitating identification of objects (and descriptions of them), of subjects (and what they were able to say); and of points where discourses overlap. This is probably the most textual section and also one of the most important in making sense of the discursive policy world.
ii) **Minor storylines and non-storylines**: (if PC R&D is not the main focus, then does this appear at all? and in what context?	
11) Intertextuality i) How are policy documents cross-referenced? (providing clarity or generating confusion)	To draw attention to the means by which discourses are reproduced and sustained or changed over time. This involves recording references across policy documents within a dedicated (and separate) spreadsheet. This is not a solitary source of data relating to the development of discursive chains of legitimacy but an aid to wider analysis. Exploring the references across documents reveals those documents that are cited and re-cited (indicating, at surface level, an apparent importance or persistence) and those that stand more or less alone. Combined with wider analysis, this examination may facilitate identification and exploration of claims to legitimacy of policy.
ii) Are there clear and explicitly shared textual / language formats between documents? Or disparities where there shouldn't be?	

12) Argument: rhetoric vs evidence i) What information was collected? And how?	To reveal what information is used (such as research based data, or references) within policy-related documents to support the arguments presented (such as recommendations for action or implementation plans); and to provide a means for critically exploring the link between information and argument.
ii) What data are provided?	
iii) Is there clear link between data and argument?	
iv) What recommendations were made?	To provide a space for recording any recommendations explicitly made within a document.
13) What use of rhetorical devices is there?	To identify the means by which discourses are shaped and communicated within policy-related documents via the use of a defined list of rhetorical devices (this list and accompanying description is included within the main text: see Box 3 - Rhetorical devices used in fact construction - on page 90). This is included to allow for exploration of the means by which text and context are linked.
IMPLEMENTATION	
14) What was the distribution / dissemination plan?	To explore whom the document appeared to be aimed at (whilst acknowledging that distribution and final readership or impact are not necessarily the same thing). This allows for recording of data that might be different to the intended audience (see section 4v above) and for exploration of how and why these might differ.
15) What was the plan and timetable for implementation?	To explore whether production of policy also entails consideration of the means for implementation (who this was aimed at, when and so on) and any anticipated action, whether a conscious decision has been made to detail implementation elsewhere (and reference to this) or whether there is no mention of implementation. This helps to recognise the fluidity of policy beyond the bounds of any one document.
16) What was the plan for evaluation and review?	To explore whether there are any considerations for exploring, reviewing or measuring achievements following the production and distribution of a policy document and implementation of any stated policy objectives; and to record and explore any stated measures of success.
17) Notes and thoughts	This provides an important space to record ideas and thoughts in relation to a specific document and to wider policy discourse/s. It provides room to record additional references that might be followed-up and explored in more detail. As with the other sections, this is reviewed to ensure anything recorded is considered as part of the process of sense-making.

Appendix 5: Description of policy documents extracted

ID	TITLE	AUTHOR	YEAR	DESCRIPTION
92	Lord Privy Seal. Framework for Government research and development. Cmnd 4814	Lord Privy Seal	1971	Green Paper on government research and development, including separate reports from the Council for Scientific Policy relating to the organisation of Research Councils and from Lord Rothschild on the organisation and management of government research and development (the later being commonly known as the Rothschild Report).
103	Lord Privy Seal. Framework for Government Research and Development. Cmnd 5046	Lord Privy Seal	1972	White Paper following the 1971 Green Paper a year earlier (see ID92 above) and discussing changes to applied government research and development and new arrangements between government customers and their contractor/s.
52	Priorities in Medical Research. Third Report of the House of Lords Select Committee on Science and Technology: Session 1987-88. HL Paper 54	House of Lords Select Committee on Science and Technology	1988	The Committee enquired into priorities in medical research, with particular reference to the needs of the NHS and examining how priorities are set. The report set out a total of 54 recommendations, the central one being that the NHS be brought into the mainstream of medical research via a new National Health Research Authority.
91	Priorities in Medical Research: Government Response to the Third Report of the House of Lords Select Committee on Science and Technology: 1987-88 session. Cmnd 902	Department of Health	1989	Government response to the review of medical research undertaken by the House of Lords a year earlier (see ID 52 above). The report led to the establishment of the NHS R&D Programme. The recommendation that a Research Authority be *organisationally* and *physically* separated from the DHSS was rejected in favour of a Department of Health Directorate of Research and Development.
1	Research for Health. A Research and Development strategy for the NHS.	Department of Health	1991	The first NHS R&D Strategy, coordinated by the first Director of Research & Development appointed to the Department of Health (Michael Peckham). The strategy sets out long term plans to bring health planning and research closer together and recommended 1.5% of total NHS budget be allocated to research and development by the end of a five-year period.

ID	TITLE	AUTHOR	YEAR	DESCRIPTION
120	Realising our potential. A strategy for science, engineering and technology. Presented to Parliament by the Chancellor of the Duchy of Lancaster. HMSO. Cmnd 2250	Office of Science and Technology	1993	White Paper presented by the Chancellor of the Duchy of Lancaster, then Cabinet Officer in charge of science and Head of the Office of Science and Technology. The paper was a result of the first review of relevant policy and organisation of science since the reports from Dainton and Rothschild in 1971 and the subsequent government response in 1972 (see ID 92 and 103 above).
3	Research and Development Task Force. Supporting research and development in the NHS. A report to the minister for health by a research and development taskforce chaired by Professor Anthony Culyer.	Professor Anthony Culyer	1994	Commonly known as the Culyer Report, this report was the result of a need to review and address mechanisms for research funding. The report recommended supporting infrastructure costs for research, recognised primary care research as a neglected area for research funding and led to what became known as Budget 1 and 2 funding streams.
85	Medical Research and the NHS Reforms. Report from the House of Lords Select Committee on Science and Technology. HL Paper 12.	House of Lords Select Committee on Science and Technology	1995	This Select Committee report reviewed the NHS R&D strategy, paying particular attention to the implementation of reforms following the Culyer report and discussing other issues affecting medical research (such as academic careers); the shift of healthcare away from hospital; and aspects of intellectual property. The Committee made a series of recommendations, some focused on primary care research, and highlighted the need to build capacity and infrastructure.
90	Medical research and the NHS reforms: Government Response to the Third Report of the House of Lords Select Committee on Science and Technology: 1994-95 session. Cmnd 2984.	Department of Health	1995	Government response to House of Lords Select Committee report from earlier the same year that reviewed medical research and the NHS reforms (see ID 85 above). The report responded to each of the recommendations made by the House of Lords Select Committee and discussed the general development of the NHS R&D programme in England.
31	Primary Care: Delivering the Future. Cmnd 3512.	Department of Health	1996	Set out an agenda for realising a primary care-led NHS, focused on evolutionary (as opposed to radical) change. Recognising changes in the preceding years, the document described a local and national programme for action to give primary care professionals and their teams a more significant role in improving services.
15	National Working Group on R&D in Primary Care: final report.	Professor David Mant	1997	Convened by the Department of Health Central R&D Committee in July 1996 to undertake a strategic review of primary care research, the report set out strategic principles and objectives to guide the development of primary care research and development with the aim of

ID	TITLE	AUTHOR	YEAR	DESCRIPTION
				increasing the evidence-base in primary healthcare, and made recommendations on the means of achieving these.
32	The New NHS. Modern, Dependable. Cmnd 3807.	Department of Health	1997	Described the new Labour Government's ten-year programme to develop a modern and dependable NHS including proposals for a move away from the internal market to national performance frameworks; a reduction in bureaucracy, integrated care; and the development of local responsibility and partnership via the development of new Primary Care Groups.
16	NHS R&D Strategic Review: Primary Care. Report of Topic Working Group of the NHS R&D Strategic Review Chaired by Professor Michael Clarke.	Department of Health	1999	The strategic review was set up to appraise the NHS R&D strategy and included a series of sub-groups. This was the report of the sub-group on primary care, chaired by Professor David Mant. The report addressed changes in the structure of primary care, considered research relevant to the provision of NHS-led primary care services and reviewed progress on the 5 strategic objectives proposed within the earlier *Mant Report* (1997) (see ID 15 above).
6	Research and Development for a First Class Service: R&D funding in the new NHS.	Department of Health	2000	The report set out proposed changes to harmonise the reform of research and development funding with the wider NHS modernisation programme, including the need for a system of research governance for health and social care.
50	The Tenure-Track Clinician Scientist: A New Career Pathway to Promote Recruitment into Clinical Academic Medicine.	Academy of Medical Sciences	2000	The report assessed barriers and disincentives to academic training associated with recent changes in clinical career structures and made suggestions for developing career pathways for trainees in academic medicine, including the development of fifty clinician scientist posts per year.
84	Excellence and Opportunity: a Science and Innovation Policy for the 21st Century. Cmnd 4814	Department of Trade and Industry	2000	This White Paper explored the opportunities to be gained from generating and exploiting scientific discoveries. The paper proposed an explicit combination of science and innovation in order to generate wealth and employment and to improve standards of living associated with disease, crime and environmental degradation. The recommendations made were described as a means for maintaining the UKs leading world position in the global economy.
9	Science and Innovation Strategy.	Department of Health	2001	The strategy emerged from a call for all government departments to consider strategic development of science and innovation following the earlier White Paper (see ID 84 above). The strategy described major science and innovation priorities of the Department of Health over a 5 to ten year period.

ID	TITLE	AUTHOR	YEAR	DESCRIPTION
36	Shifting the Balance of Power: Securing Delivery.	Department of Health	2001	This document set out the organisational changes needed to support delivery of the NHS Plan and the emergent view on how the new system will look and operate, particularly in relation to public health and primary care.
35	Teaching Primary Care Trusts.	Department of Health	2001	This document outlined the development of Teaching PCTs, providing detail on establishment. It reflected on the relationship between teaching, research and clinical care and included sections relating to research management and governance.
17	National Health Service Reform and Health Care Professions Bill (Third Reading) 16 May 2002.	House of Lords Hansard	2002	This is a transcript of a House of Lords debate regarding the role of Primary Care Trusts in relation to both education and research.
112	Strengthening Clinical Research. A Report from the Academy of Medical Sciences.	Academy of Medical Sciences	2003	This report drew attention to the 'translational gap', the gulf between basic discoveries and converting such discovering into innovations that directly benefit patients or prevent disease. It focused particularly on experimental medicine and large-scale clinical trials and was highly influential in the development of subsequent research policy (see ID38 below).
53	Bioscience 2015. Improving National; Health, Increasing National Wealth. A Report to the Government by the Bioscience Innovation and Growth Team	Department of Trade and Industry	2003	The Bioscience Innovation and Growth Team took a strategic approach to the future of the bioscience industry. The report identified barriers and critical success factors for the future competitiveness of UK biosciences and described a vision that by 2015 the UK will have secured its position as a global leader in the area. It made a series of recommendations on what action should be taken to overcome these barriers and was highly influential in the development of subsequent research policy (see ID38 below).
116	Innovation Report. Competing in the Global Economy: the Innovation Challenge.	Department of Trade and Industry	2003	This report emerged following a request from the Prime Minister for the Secretary of State for Trade and Industry to chair a ministerial team to lead the innovation agenda. It explored UK innovation performance, why this is important, the UK economic position in global market and the current and future roles of the Government in relation to this.
19	Joint Ministerial Review of the role of Primary Care Trusts in relation to learning and research in the new NHS. Report of Phase I.	Department of Health, Department for Education and Skills	2003	The report is part of a response by the Government to debates that occurred during the passage of the NHS Reform and Health Care Professions Bill in 2002 (see ID17 above). It describes the first phase of work undertaken to review the role of PCTs in relation to education and research, providing a breakdown of key research roles and responsibilities.

ID	TITLE	AUTHOR	YEAR	DESCRIPTION
41	Science and Innovation: Working Towards a Ten-year Investment Framework.	HM Treasury, Dept of Trade and Industry, Dept for Education and Skills	2004	This document set out the governments' emerging thoughts on the economic and financial context for the proposed twenty-year investment framework for public and private investment in UK science and innovation. It was intended as a consultation document inviting feedback and with the aim of providing a secure, medium term platform for innovation and productivity.
38	Research for Patient Benefit Working Party - Final Report	Department of Health	2004	The working group was set up following reports from the Biosciences Innovation and Growth Team and the Academy of Medical Science (see ID 112 and 53 above). The subsequent report brought forward practical proposals for implementing the reports and discussed development of a new UK Clinical Research Collaboration and clinical research networks (based on an existing model of cancer research networks).
111	The Government Response to "Biosciences 2015", the Report by the Bioscience Innovation and Growth Team.	Departments of Health & Trade and Industry	2004	The report set out the government response to each of the recommendations made by the Bioscience Innovation and Growth Team (see ID53 above), providing an update of government action to the points raised.
96	Science and Innovation Investment Framework 2004-2014.	HM Treasury	2004	This government science and innovation strategy was published alongside the 2004 Spending Review and followed earlier consultation (see ID 41 above). Section 4 discussed Business Research & Development and Innovation, setting the broad government agenda in the context of wider global and economic development.
110	Best Research for Best Health: A New National Health Research Strategy - the NHS Contribution to Health Research in England: A Consultation.	Department of Health	2005	A consultation on the proposed new National Health Research Strategy that aimed to create a health research system in which the NHS supported those engaged in leading-edge research to focus on the needs of patients and the public. The paper included a range of proposals such as a National Institute for Health, and new Academic Medical Centres.

Appendix 6: Interview topic guide for policy stakeholders

Main features of primary care research before the first NHS R&D strategy...

- How and why has primary care research developed?
- What have been the main influences?

Main features of primary care research policy since the first NHS R&D strategy...

- Are there any defining characteristics of primary care R&D policy?
- What is the philosophy behind PC R&D policy?
- Is there anything that you think should have featured but didn't / hasn't?
- What is the basis for supporting PC R&D by the Department of Health?
- Should PC R&D be a protected stream of funding? Why? For how long?

Policy process relating to primary care research....

- What information or opinion informs policy making?
- Is this in any way different for primary care R&D policy?
- Who are the key individuals / organisations involved in developing PC R&D policy?
- What's been your role in the development of PC R&D policy?
- There appears to be a lack of 'data' within policy documents; why do you think this is?
- How do you think the policy process might be improved?

Who should be doing primary care R&D?

- How is this reflected in policy?
- Are there any particular groups that have benefited from R&D policy / PC R&D policy?
- Are there any particular groups that have *not* benefited from R&D policy / PC R&D policy?

Impact of wider developments...

- DH wider R&D strategy
- Government R&D funding – science and innovation
- Growth of pharmaceutical companies / clinical trials
- Shift to encompass wider perspective than 'biomedicine'? e.g. CAM awards
- Impact of the EU / global research economy
- Development of research governance
- Evidence-based policy movement
- Patient choice, public involvement movements

What do you think the future holds for primary care research?

- Research for Patient Benefit
- UK Clinical Research Collaborative / Network
- New Director of R&D at the Department of Health
- Public involvement / 'expert' patients
- Global economy / European Union
- Pharmaceutical industry
- Secondary care

If you had a wish list of things that might change for primary care research, what might it include?

Examples of specific questions for individual interviewees...

- To what problem is X a solution? Was Y policy or information?
- Who commissioned X? How and why did it come about? What's the role of Y in relation to all of this? Were X and Y linked or coordinated in some way?
- How have you become involved in X group/s? How did you come to contribute to Y report/s? How does your involvement in Z relate to other government initiatives?
- What information was collected to inform the development of X?
- How does your organisation relate to other groups? (e.g. Department of Health, NHS Trusts, academic, industry, public, users, carers)
- How did the HoL Science and Technology Committee come to address NHS R&D?
- To what *problem* was the first NHS R&D strategy a *solution*? Why was there no specific NHS R&D Strategy before this? Who set the terms of reference for the strategy? Why was there no separation of NHS and R&D? (pick up on the separation of research and government) Has the balance between health & wealth shifted? In what way / to what ends?
- How have PC R&D and nursing research impacted on each other?
- Is the loss of NHS E Regional Offices documented anywhere? What's been the impact of losing regional R&D capacity? What do you think the future holds for research based in PCTs?
- When did the term 'primary care led NHS' come into being?
- Who should be doing clinical / health-related research? Who should be doing primary care research?
- How is non-clinical (and non-medical?) research placed within primary care?
- What does the future hold for primary care research support organisations? GPRF?
- How do primary care research networks fit with the new research infrastructure?
- How does primary care research fit with the wider considerations of the pharmaceutical industry? How did Pharmaceutical Industry Competitiveness Taskforce come about? What is the function / agenda of the Ministerial Industry Strategy Group?
- How have relationships changed between: industry and government / NHS; industry and the public; industry and academia?

Appendix 7: Transcription extract

Confidential ID 10 checked

I So do you think primary care research in the last five years particularly, the false starts are behind us?

R Some of them, for the networks, the problems now are, the problem has become and I'm talking about the universities I suppose, is the RAE, and the RAE is unquestionably no matter how you slice it focused on biomedicine, yet you have to survive, and quite a lot of people now are losing their identities as general practice / primary care researchers and research departments and being put into divisions of health services research or population sciences or something to make the RAE return better, you know, to hide weaknesses and the rest of it.

And that's – sorry I lost my train of thought there - I think that's had some adverse affects because funding up until recently has tended to fog over the laboratory base and more basic if you like medical sciences and it's been more difficult to get money for applied research. Having said that, you know, the HTA programme and the STA programme have recently put out a lot of bids which are directly very, very relevant to HSR and primary care, so in a way you can't grumble but if you look at the totality of research funding that's available and the amount of it to which primary care people can appropriately apply it's still a very small proportion.

I Yes absolutely. One of the things you mentioned earlier on was about the original 1.5% that Peckham had suggested or recommended. Do you know where that's come from and how it relates to funding for primary care R&D at all?

R No I don't. My understanding is that that pledge was never made by government, it was in a Lancet editorial I think, or BMJ, I remember first reading it, but I don't think it ever was endorsed.

I I know they've never reached it

R No. Sorry one other thing to insert, back in those nineties of course there was the other, as a result of the topic review there was a DH/MRC primary care call, 10 million pounds worth MRC/DH money, so these things had a genuine effect. And of course David Mant's report led to the development amongst other things of the R&D awards programme

Appendix 8: Foreword to the Mant Report, 1997

"Primary care is at the heart of NHS decision-making. The stated objective of a primary care led NHS not only recognises a fact of life where most patient interactions and most treatment is delivered through primary care. It also carries a heavy responsibility in carrying out strategies to prevent disease. The opportunities are great, but as a field of research, it is still relatively under-explored. It is a field where collaboration between workers with different disciplinary backgrounds is essential. It requires the development of new methods to address its own specific questions and needs. It requires to develop its own structures for carrying out effective investigation, but most of all it needs the enthusiastic dedicated individuals who will ask the right questions and set about finding an appropriate way of answering them. Our task is to ensure that they are given every encouragement and obstacles are removed. The group chaired by David Mant has spelled out a strategy which will form the basis of NHS R&D support of this critically important field over the next few years. I am grateful to David and his colleagues for having provided such an impressive and well argued document.

Professor John Swales
Director of Research and Development"

Appendix 9: Contributors to health-related research policy

Table A3: Contributors to health-related research policy identified in the policy documents studied*

Name	Job title / role**	Primary care main role	Primary care minor role	Other role	Freq.
Professor Sally Davies	National Director of R&D, DH; Regional R&D Director NHS E London (and formerly North Thames)		•	•	6
Dr Russell Hamilton / Dr Chris Henshall	Deputy Director of R&D, DH		•	•	5 (2 / 3)
Professor Maggie Pearson	NHS E Regional Director of R&D; Professor of Health & Community Care, University of Liverpool; Director, Health & Community Care Research Unit; DH Deputy Director of HR		•	•	5
Professor Roger Jones	Wolfson Professor of General Practice, Kings College London; Chair of Society of Academic Primary Care	•			5
Professor Ann Louise Kinmonth	Professor of General Practice, University of Cambridge (formerly University of Southampton)	•			5
Professor David Mant	Professor of General Practice, University of Oxford; Regional R&D Director, NHS E South and West Regional Office	•			5
Professor Anthony Culyer	Director of Health Development, Professor of Economics & Pro Vice Chancellor at University of York			•	4
Lord Hunt of King's Heath	Minister of State for Health			•	4
Professor Mark Walport	Wellcome Trust; Chairman & Head, Division of Medicine, Imperial College School of Medicine			•	4
Professor Denis Pereira Gray	Director of the PG Medical School & Professor of General Practice, University of Exeter; Royal College of General Practitioners	•			3
Professor Cliff Bailey	NHS E Regional Director of R&D		•	•	3
Nick Partridge	Chief Executive, Terrence Higgins Trust; INVOLVE		•	•	3
Professor Mary Renfrew	Professor of Midwifery, University of Leeds		•	•	3

Name	Job title / role**	Primary care main role	Primary care minor role	Other role	Freq. ***
Professor Richard Hobbs	Professor of Primary Care, University of Birmingham	●			2
Professor John Howie	Professor of General Practice, University of Edinburgh	●			2
Ms Claire Newland	Programme Manager, Health Services Research and Primary Care, MRC	●			2
Professor Martin Roland	Director, NPCRDC, University of Manchester	●			2
Professor Fiona Ross	Professor of Community Nursing, St Georges Hospital	●			2
Ms Regina Shakespeare	Chief Executive, Luton PCT	●			2
Professor Nigel Stott	Professor of General Practice, University of Wales College of Medicine	●			2
Ms Deborah Unsworth	Senior Policy Manager, PCT Policy & planning, DH	●			2
Professor Graham Watt	Professor of General Practice, University of Glasgow	●			2
Professor Sally Baldwin	Director, Social Policy Research Unit, University of York		●	●	2
Professor Angela Coulter	Kings Fund		●	●	2
Mr John Ennis	Branch Head, Learning and Personal Development, DH		●	●	2
Dr Alan Glanz	Policy Research Programme, Department of Health		●	●	2
Professor David Gordon	Council of Heads of Medical Schools, University of Manchester		●	●	2
Mr John James	Former Chief Executive, Kensington, Chelsea and Westminster HA		●	●	2
Dr George Sarna	Programme Manager, Health Services & Public Health Research Board, Medical Research Council		●	●	2
Dr Alison Spaull	Chief Scientists Office, Scotland		●	●	2
Mr Marc C Taylor	Branch Head, RD3, NHS E		●	●	2
Professor John Bell	Regius Professor of Medicine, University of Oxford			●	2
Dr Joan Box	Medical Research Council Head Office			●	2
Mr John Brassington	Regional Director of Finance, Trent Regional Office			●	2
Mr Gordon Brown	Chancellor of the Exchequer			●	2
Professor Sir John Butterfield	Former Regius Professor of Physic, University of Cambridge			●	2
Professor Michael Clarke	University of Leicester			●	2
Dr Lisa Cotterill	Assistant Director, NCCRCD			●	2
Mr Nigel Chrisp	Regional Director, NHS E London; Chief Executive, NHS			●	2

Professor Bernard Crump	CE Shropshire & Staffs StHA			•	2
Professor Christopher Edwards	Universities UK; Vice Chancellor, University of Newcastle-upon-Tyne			•	2
Lord Flowers	House of Lords Select Committee on Science and Technology				2
Ms Mark Gilbert	National Assembly for Wales			•	2
Mr David Highton	Chelsea & West Healthcare NHS Trust			•	2
Ms Sue Jones	Regional Head of NHSU (North West)			•	2
Professor Peter Lachmann	Not given				2
Neil McKay	Chief Operating Officer, DH			•	2
Lord Nelson of Stafford	House of Lords Select Committee on Science and Technology			•	2
Lord Perry of Walton	House of Lords Select Committee on Science and Technology			•	2
Professor Sir Keith Peters	Regius Professor of Physic., University of Cambridge; Academy of Medical Sciences			•	2
Lord Sainsbury	Parliamentary Under-Secretary for Science and Innovation, DTI			•	2
Professor John Saville	Professor of Medicine, Vice Principal and Head of College of Medicine and Veterinary Medicine, University of Edinburgh			•	2
Dr Howard Scarffe	Head of Career Schemes / Medical Director, Wellcome Trust			•	2
Dr Eric Sidebottom	Not given				2
Lord Turnberg	Vice President, Academy of Medical Sciences; Scientific Advisor to the AMRC			•	2
Professor Patrick Vallance	Professor of Medicine, Head of Dept of Medicine, UCL			•	2
Lord Walton of Detchant	House of Lords Select Committee on Science and Technology			•	2
Mr Martin Williams	Department for Education and Skills			•	2

* Not including contributions via forewords & introductions or the raising of questions in the Houses of Parliament.

** This includes all posts listed across contributions (i.e. current at the time of writing, as well as past).

*** This includes those individuals cited on more than one occasion across the documents studied.

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